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This is a final report for year two (FY 96) of a comprehensive epidemiologic research study of a large population of military women assigned to Naval ships. This multi-year project was conducted under the Congressionally established Defense Women's Health Research Program (DWHRP). The objectives of this study included descriptions of the health status, health care utilization patterns, health care needs, reproductive characteristics, birth control availability and pregnancy-related issues, psychological characteristics, perceived stress, and self-reported occupational and environmental exposures of women assigned aboard U.S. Navy ships and a comparison group of men aboard the same ships. This project utilized four primary data collection methods: (1) a questionnaire administered aboard ship for ships newly enrolled in the study during year two, (2) a follow-up questionnaire administered by mail to each individual who was surveyed during year one and who is still on active duty (3) ascertainment of sick call visits aboard ship, and (4) structured discussions with medical department staff.

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# **FOREWORD**

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# TABLE OF CONTENTS

# **VOLUME 1**

Title 1	Page .	
Section		REQUIRED SUBMISSION DOCUMENTS
		m 298
Section Table		TABLE OF CONTENTS tentsiv
Sectio	n C:	INTRODUCTION, METHODS, RESULTS, AND CONCLUSIONS
		1
1.0		uction
1.0	1.1	Women Aboard Ship
	1.1	Issues Facing Women Aboard Ship
	1.3	Overview of Accomplishments Prior to this Reporting Period
2.0		ods
2.0	2.1	Maintenance of List of Ships Enrolled in the Study
	2.2	U.S. Navy Shipboard Health Follow-up Survey Development
	2.3	U.S. Navy Shipboard Health Follow-up Survey Administration
	2.4	Sick Call Visit Ascertainment
	2.5	Medical Department Structured Discussions Update
	2.6	Development of Reports
3.0	Result	s
	3.1	Results I: Accomplishments
	3.1.1	U.S. Navy Shipboard Health Survey and Anonymous Health and Behavior
		Supplemental
	3.1.2	Sick Call Data Obtained
	3.1.3	Medical Department Structured Discussion Accomplishments 24
	3.1.4	Report Development
	3.2	Results II: Findings
	3.2.1	Major Topic Area: Family Planning and Pregnancy Issues
	3.2.2	Major Topic Area: Psychosocial Factors
	3.2.3	Major Topic Area: Health Conditions and Life Style Factors
	3.2.4	Major Topic Area: Population Demographics
4.0	Conch	usions
<u>Sectio</u>		REFERENCES
<b>Biblio</b>	graphy	

# **APPENDICES**

Appendix A Briefings and	Presentations, Workshops
Appendix B	
Report Topic	s and Analysis Plans B.1
Appendix C	· ·
	Collection Instruments
C.1	Follow-up Survey Instrument, Form WA
C.2	Follow-up Survey Instrument, Form MA
C.3	Follow-up Survey Instrument, Form WB
C.4	Follow-up Survey Instrument, Form MB
C.5	Follow-up Survey Instrument, Form WC
C.6	Follow-up Survey Instrument, Form MC
C.7	Follow-up Survey Instrument, Form WD
C.8	Follow-up Survey Instrument, Form MD
C.9	TWA Flight 800 Recovery Instruments, Form WB G
C.10	TWA Flight 800 Recovery Instruments, Form MB G
VOLUME 2	
Appendix D Results	
D.1	Contraceptive Use and Attitudes Toward Family Planning in Navy Enlisted Women and Men
	Marie D. Thomas, Ph.D.
	Patricia J. Thomas, M.S.
	Frank C. Garland, Ph.D D.1
D.2	Stress and Well-being of Women Serving Aboard Navy Ships
	James A. Martin, Ph.D., BCD
	Gregory A. Acevedo, M.S.
	Frank C. Garland, Ph.D
D.3	Gender Differences in the Association Of Life Style Factors to the
	Prevalence and Symptoms of Migraines and Other Headaches Among
	Navy Personnel
	Deborah L. Wingard, Ph.D.
	Donna Kritz-Silverstein, Ph.D.
	Frank C. Garland, Ph.D

D.4	The Association of Behavior and Life Style Factors With Menstrual Symptoms Donna Kritz-Silverstein, Ph.D. Deborah L. Wingard, Ph.D. Frank C. Garland, Ph.D. D-49
D.5	Normative Comparisons of Psychological Symptomatology in Navy and Army Women and Men: Effects of Gender, Demographic Characteristics, and Deployment History Kathleen M. Wright, Ph.D. Frank C. Garland, Ph.D
D.6	Availability of Gynecological Supplies and Other Issues Related to the Reporting Requirements of the Department of the Navy's Policy on Pregnancy Frank C. Garland, Ph.D. David Timberlake, M.P.H. Diana R. Simmes, M.P.H.
D.7	Descriptive Tables of Demographic Characteristics, Family Structure, Women's Health-related Issues, and Occupational Exposures of Personnel Participating in the U.S. Navy Women Aboard Ship Study Frank C. Garland, Ph.D.  David Timberlake, M.P.H.  Diana R. Simmes, M.P.H.  D-104
D.8	Expected Occurrence of Ectopic Pregnancies and Spontaneous Abortions During the First 20 Weeks of Pregnancy in Navy Women Serving Aboard Ship Frank C. Garland, Ph.D. Edward D. Gorham, M.P.H. Cedric F. Garland, Dr.P.H. D. Stephen Nice, Ph.D. D-139
D.9	Organizational Influences on Gender Differences in Stress and Strain Aboard U.S. Navy Ships Ross R. Vickers, Jr., Ph.D. James A. Martin, Ph.D., BCD

#### **ABSTRACT**

Purpose. This is a final report for year two (FY 96) of a comprehensive epidemiologic research study of a large population of military women assigned to U.S. Navy ships. This multi-year project has been conducted under the Congressionally established Defense Women's Health Research Program (DWHRP). This study was designed to address aspects of the four major research topic areas specified in an Institute of Medicine Report which provided recommendations for research on the health of military women. These topic areas include factors affecting the health and performance of women serving aboard ship, psychological and health issues resulting from integration of women into a hierarchical male environment, health promotion and disease prevention, and access to and delivery of health care. The objectives of the study include descriptions of the health status, health care utilization patterns, health care needs, reproductive characteristics, birth control availability and pregnancy-related issues, psychological characteristics, perceived stress, and self-reported occupational and environmental exposures for women assigned aboard U.S. Navy ships and a comparison group of men aboard the same ships.

Methods. Year two of this project utilized four primary data collection methods: (1) a questionnaire administered aboard ship for personnel newly enrolled in the study during year two, (2) a follow up questionnaire administered by mail to each individual who was surveyed during year one and who is still on active duty, (3) ascertainment of sick call visits aboard ship, and (4) structured discussions with medical department staff. The population covered included all women serving aboard U.S. Navy ships, and an equal number of men matched on significant characteristics.

Results. During year two of this study, thirty ships with 1,845 women assigned aboard received the baseline survey portion of the study. These ships also provided sick call visit data, and medical department data via structured discussions. In addition, the year two Follow-up Survey, presented in Appendix C, has been administered to fourteen of the thirty-eight ships that were initially surveyed in year one selected on class and type of ship to obtain a representative sample. Additional report topics and analysis plans have been developed and are presented in Appendix B. The year two report topics have evolved out of the results obtained during year one of the study: Family Planning and Pregnancy Issues; Psychosocial Factors; Health Conditions and Life Style Factors; and Population Demographics.

Conclusions. The second year of this study has met the objectives of (1) expanding the proportion of women serving aboard ship who provided self-report information, along with a matched set of men, (2) obtaining sick call information, (3) conducting structured interviews with shipboard medical department staff, and (4) resurveying the participants from year one who are still on active duty. Year two research topics built upon results obtained during year one and year two of the study, and allowed the investigators to test new and existing hypotheses with the larger sample size (N=5,755).

Year two of this study addressed a wide range of women's health-related issues including family planning, pregnancy, and menstrual symptoms. More general health issues that were also addressed included migraines, stress, psychological symptomatology and occupational exposures. The component studies of this project have yielded important insights into these complex issues. Moreover, the study as a whole provides information which will help to ensure optimal health and readiness of all service members and will facilitate the policy development process. Topic specific conclusions are provided in reports (Appendix D) addressing the major areas covered in this report.

#### 1.0 INTRODUCTION

In 1993, Congress mandated epidemiological studies of the health status, medical care, and occupational and environmental exposures of women in the military. In response to this mandate, the Naval Health Research Center in San Diego, California, initiated a study of the health status of women aboard Navy ships. This is a final report of the accomplishments of the second year of the study.

This project is part of the Defense Women's Health Research Program (DWHRP) which was Congressionally mandated in 1994 and 1995. The project is a comprehensive epidemiologic research study of a large population of women in the military in an operationally deployed situation - assignment to ships. The Congressional Committee that established the DWHRP in 1994 commended the Department of Defense in 1995 "... for its development of a program that focuses on epidemiologic research and database development; standards and policy issues; and solutions-oriented research". Specifically, the Committee stated that the 1995 program shall include "...epidemiologic research regarding women deployed for military operations, including research on patterns of illness and injury, environmental and occupational hazards (including exposure to toxins), side-effects of pharmaceuticals used by women so deployed, psychological stress associated with military training, deployment, combat and other traumatic incidents, and other conditions of life, and human factor research regarding women so deployed". This project was designed to meet these objectives.

At the request of the U.S. Army Medical Research and Materiel Command, the Institute of Medicine (IOM) convened a Committee on Defense Women's Health Research and developed a report entitled "Recommendations for Research on the Health of Military Women", published in August of 1995. This report provides recommendations which specify what the DWHRP research topic areas should be: (1) unique to military women, (2) especially prevalent among military women, and (3) related to the ability of women to perform their mission. The specific topic areas, which expand upon the Committee's recommendations for research, fall into four broad areas: (1) major factors affecting the health and work performance of military women, (2) psychological and health issues resulting from integration of women into a hierarchical male environment, or related to women and men living and working together in close quarters, (3) health promotion and disease prevention, and (4) access to and delivery of health care. The objectives of this comprehensive study touch on all of these major research areas.

#### 1.1 Women Aboard Ship.

Women have been assigned to noncombatant ships since 1978. Currently, approximately 8,293 women serve aboard or are scheduled to serve aboard 92 U.S. Navy ships [1]. These numbers do not include women serving aboard auxiliary or hospital ships under the control of the Military Sealift Command. The Chief, Bureau of Naval Personnel (BUPERS) PERS-00W has developed assignment plans which will result in over 13,000 women serving aboard over 130 U.S. Navy ships by 1998. Since 1978, more than 35,000 women have served aboard U.S. Navy ships [1].

It is the goal of the Navy, as stated by the Chief of Naval Operations in 1995, to have all ship types, except submarines, open to women. Women aboard ships face a wide range of occupational issues that are exaggerated because of the intense industrial environment of a ship, the intensity of activity when deployed, long-term separation from home, and factors associated with social isolation and integration. This large number of unique occupational stressors facing women involved in non-traditional occupations makes the study of this population imperative both to guarantee a healthful work environment and to maintain force readiness.

Data derived from shipboard outpatient records, shipboard medical departments, and survey data will provide information of immediate relevance to health care for women aboard ships. This information will assist the Chief, Bureau of Medicine and Surgery (BUMED) and fleet decision-makers in several ways: (a) it will help define the personnel, resources, and training needed to meet the medical needs of women aboard Navy ships; (b) it will provide a scientific basis for making changes to the provision of medical care aboard ships to better meet the medical needs of deployed women and men, thus potentially improving effectiveness; (c) it will provide a basis for provisioning adequate quantities of contraceptives and medical supplies aboard ships to meet the needs of women; (d) it will provide an assessment of potential health hazards to personnel; (e) it will address whether more pre-deployment screening could reduce the need for medical evacuation; and (f) it will provide a scientific basis for design and implementation of interventions.

The continued development of a longitudinally followed cohort such as this will enhance the Navy's understanding of the primary issues facing women aboard ships, determine the magnitude of issues and their impact on readiness, and provide the information needed to take corrective action to maintain optimal well-being of military women and optimal military readiness at all times.

#### 1.2 <u>Issues Facing Women Aboard Ship.</u>

Consultations with personnel at BUMED, BUPERS, Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT), Commander in Chief, U.S. Pacific Fleet (CINCPACFLT), and others have assisted in defining the major issues facing women aboard ship. Pregnancy-related issues are of paramount importance. The following paragraphs list the major issues associated with

women aboard ship that have emerged in discussions. These issues have been the basis for the approach that has been taken in this study and for defining the content of the data collection instruments that were used during the first and second years. These major issues, together with the preliminary results obtained during year one, have also been the basis for defining the specific research topics that have been pursued against the collected data throughout the second year of the project. Clearly, not all issues represented are of equal magnitude in terms of effects on fleet readiness, and this listing should not be construed as representing equality of thrust.

In keeping with the major research topic guidelines recommended by the IOM: (1) unique to military women, (2) especially prevalent among military women, (3) related to the ability of military women to perform their mission responsibilities, these major topic areas have been further subdivided into the following categories for this project: (1) occupational health; (2) health care delivery aboard ship; (3) pregnancy; (4) health promotion (diet and nutrition, physical exercise, tobacco and alcohol use, and preventive services); (5) psychosocial; and (6) family issues. A brief explanation of each of these topics and the issues involved is reiterated in this final report, and is presented in the following paragraphs.

Occupational health. The shipboard environment is intensely industrial. Women assigned to ships are exposed to a wide array of physical, chemical, and other occupational hazards. Many occupations currently held by women were traditionally filled by men. Women engaged in non-traditional occupations may be exposed to occupational stressors that may affect women differentially from men [2]. For example, repetitive biomechanical stressors associated with hand-tool operation and vibration may be associated with higher rates of some illnesses in women than in men in the same occupations [3]. Environmental exposure to solvents, pesticides and other toxins may have effects on reproductive health [4]. In addition to these exposures, risks associated with exposure to ionizing radiation and the potential effects of non-ionizing radiation (microwaves, electromagnetic fields) on women's reproductive health need further scrutiny [5,6]. Possible synergistic effects of multiple exposures also need to be quantified.

Health care delivery. Planning resources to provide optimal health care for a growing proportion of women serving aboard a wider range of ships presents a challenge for Navy medicine. Health care providers themselves believe that the increased presence of women on board may necessitate upgrading a ship's medical staff (i.e., a physician's assistant, rather than an independent duty corpsman, or a medical officer rather than a physician's assistant) [7,8]. Other research indicates that women are more likely to participate in regular Pap tests and mammography screening if the health care provider is a woman [9]. Since screening rates for cervical and breast cancer are considered markers of quality health care, such factors affecting women's utilization of preventive medical services need to be considered in planning for the full integration of women into the shipboard environment. Previous analyses have been reported on the needs for obstetrical (OB) and gynecological (GYN) care aboard the submarine tenders USS FRANK CABLE [7] and USS HUNLEY [8]. Hughey analyzed records of 222 women crew members associated with the USS FRANK CABLE, and determined that the women had 2,140 medical encounters for obstetrical or gynecological care and 176 routine prenatal OB visits during

710 woman years of military service, for a rate of 3.5 OB-GYN visits per year. The most common reasons for the visits were routine gynecological examinations (30 percent), sexually transmitted diseases (14 percent), and menstrual abnormalities (13 percent) [7].

Pregnancy. Women aboard ship are predominately of childbearing age and pregnancy is, therefore, a topic which deserves close attention. During a one-year period ending in June 1990, 98 documented pregnancies occurred among approximately 300 women crew members assigned to USS FRANK CABLE [7]. The Department of the Navy's Pregnancy Policy provides that pregnant service women must be transferred off ship by the 20th week of pregnancy, or sooner under a variety of circumstances [10]. Rates of pregnancy, determination of planned versus unplanned pregnancies, and underlying motivation for the timing of pregnancies are all issues needing further study. The rate of ectopic pregnancy in military populations has been described as 1 per 83 live births in an active-duty and dependent military population that received its health care at the U.S. Air Force Regional Medical Center in Wiesbaden, Germany [11]. This rate is significantly higher than the rate of 1 ectopic pregnancy per 100 live births in the general U.S. population [12]. The rates among active-duty enlisted personnel appeared to be particularly high in the Wiesbaden region, at 1 per 27 in the U.S. Army and 1 per 32 in the U.S. Air Force [11]. These data are important, since ectopic pregnancies may require rapid diagnosis and prompt surgical intervention, and account for 12 percent of maternal deaths [11].

Health promotion. Recognizing the role that personal health behaviors play in morbidity and mortality risks, the U.S. Navy has established a comprehensive Health Promotion Program [13] to foster the physical and emotional well-being of its personnel and to reduce the risks of adverse health outcomes. Within the broader context of health promotion, it is becoming well-documented that men and women differ in their risks for a variety of illnesses as well as in health-related behavior. These issues are particularly salient in the U.S. Navy shipboard environment where women's expanded roles are exposing them to new physical and psychological demands and potential health hazards.

Diet and nutrition. Shipboard food must meet Navy nutritional standards, but storage and space constraints on deployed ships limit the range of menu options available. In general, it has been reported that foods eaten away from home have lower nutrient densities and higher fat content than foods prepared and eaten at home [14]. While efforts are being made to offer more fresh produce and at least one low-fat entree choice at every meal in Navy mess halls and galleys, concern for the palatability and acceptability of military food has resulted in setting U.S. Navy nutritional standards at levels that exceed the recommended daily allowance (RDA) for fat (not to exceed 35% of total calories under garrison feeding conditions), salt (2 to 4 times the RDA for sodium), and protein (about twice the recommended daily amount) [15]. U.S. Navy nutritionists also acknowledge that female personnel may require supplemental iron to meet the recommended 18 mg/day for women [15]. Because women have different nutritional needs than men, particularly in micronutrients (e.g., iron, calcium) but require fewer calories, women aboard ship may find it difficult to meet their dietary needs and/or choices (e.g., more fresh produce, less fat, less sodium, less red meat) [16].

Physical exercise. Regular physical activity is essential for cardiovascular health, musculoskeletal strength and flexibility, and weight control [17]. It is important, therefore, that women aboard ship be provided with adequate facilities and sufficient time to engage in both aerobic and anaerobic exercise. In addition to its cardiovascular and weight-maintenance benefits, aerobic exercise has been found to improve mood profiles and self-esteem in women [18] and may help reduce their risk of certain cancers [19]. Weight-bearing exercises, such as walking or jogging, are especially important for women to help preserve bone density and prevent osteoporosis [19]. Anaerobic weight training should be included in the exercise regimen to help build and maintain muscle strength, which is critical for safely navigating the shipboard environment as well as performing a number of occupational specialties. It is significant in this regard that shipboard personnel have been found to have somewhat lower classification scores on the Navy's mandatory Physical Readiness Test (PRT) for sit-ups, push-ups, and overall PRT score than personnel in other communities [20].

Tobacco and alcohol use. Within the U.S. Navy community, both cigarette smoking and alcohol consumption were reported to be highest among personnel assigned to surface ships (women were not included in the study) [20]. The same study found that personnel in both surface ship and submarine communities consistently reported less positive feelings about their lives than did shore-based personnel [20]. Substance use and abuse are often associated with stress and negative moods, such as loneliness, boredom, and depression [21]. There is mounting evidence that women in stressful occupations may be at particular risk for substance use and abuse [22]. Women aboard ship may be at high risk for substance abuse, although this has not been documented. It is important to explore these relationships and their implications for preventive interventions.

Preventive services. Approximately one fourth of all visits to the sick bay aboard ship are for routine health services and preventive care [23]. The monthly visit rate for women is higher than for men which is attributable, in part, to female-specific procedures, such as Pap tests and contraceptive prescriptions [23]. Services associated with female reproductive health, such as pregnancy tests, birth control counseling and prescriptions, and screening and education programs for STDs, are important to women's health. Because of the alarming increase in STD rates nationally, and because untreated chlamydia, gonorrhea, and infections from other pathogens in women can result in infertility, ectopic pregnancy, and congenital problems in offspring, reducing the risks associated with STDs has become especially critical [11,24].

**Psychosocial.** Stress from a wide range of causes is a major occupational health problem for women [25], and many gender differences in health status may be associated with responses to stress. For example, depression, obsessive-compulsive disorders, and panic disorders have been reported to be more prevalent in women, while substance abuse, antisocial personality disorders, and suicide tend to be more frequent in men [26]. The stressors typical of shipboard life, such as separation from family, crowding, noise, and work intensity, may be compounded for women by their new role on board ship. As women are brought aboard some ships for the

first time, their status as a minority subgroup will be highlighted, and new job responsibilities and role expectations may test self-esteem and contribute to stress. On the other hand, job rewards, such as recognition and challenge, may mitigate the negative effects of work-related stress [27]. This study will include measures of the degree of stress experienced by women aboard ship, the coping strategies they employ, and the impact of stress on their health and quality of life. Because women generally report more reliance on social support networks than men [28,29], and because social support is linked to health, an important area of investigation will be the availability and utilization of social support in the shipboard milieu.

Family issues. Family separation issues will not be a major focus of this study. This important subject area will be covered through interactive proposals in association with Universities. As women begin to take on a larger role in today's military, it is essential to determine what impact this has on their families. Military-induced separation has been ranked by military spouses as the most dissatisfying aspect of military life [30-32]. To date, there has been little investigation specifically into the effects of separation of women in the military from their families. However, a study examining the effects of separation among civilian mothers of infants, children, and toddlers noted agitation during the separation period and depressed behavior and activity levels following the mother's return [33]. More research is needed, since studies to date indicate there is evidence that family factors influence retention. An important finding is that high-performing and successful military personnel are more likely to plan to remain in the military if they believe that the quality of military life for their children compares favorably with that of children in civilian life [34,35].

### 1.3 Overview of Accomplishments Prior to this Reporting Period.

During year one of this study thirty-eight ships with 6,072 women assigned aboard participated in the survey portion of the study, fifty two ships provided over 35,000 sick call visits, and thirty-seven ships provided 68 interviews of medical department personnel. Information collected as of October 30, 1995 for the first 4,337 shipboard personnel, 21,882 sick call visits, and 36 shipboard medical department interviews were analyzed and were reported in Year 1. Results were reported by the major topic areas of: Population Demographics, Family Structure, and Occupational Factors; Health Conditions and Health Perceptions; Psychosocial Factors; Health Care Delivery Aboard Ship; Pregnancy and Related Issues; Health Promotion, Wellness, and Life Style Issues; Sick Call Visits; as well as a separate report on the USS DWIGHT D. EISENHOWER (CVN-69), the first combatant ship in the Navy to deploy with women aboard.

#### 2.0 METHODS

This project utilized four primary data collection methods: (1) a self-administered survey given aboard ship, (2) a self-administered Follow-up Survey, (3) ascertainment of sick call visits aboard ship, and (4) a structured discussion with medical department staff aboard ship. The

population covered includes all women serving aboard U.S. Navy ships, and an equal number of men matched on significant characteristics.

## 2.1 <u>Maintenance of List of Ships Enrolled in the Study</u>.

The process of identifying ships to be enrolled in this study that was designed during year one has been maintained. The list of all ships that have been or are presently eligible for inclusion in this multi-year study is presented in Table 1.

Table 1. A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	NUMBER OF PERSONNEL ASSIGNED WOMEN MEN TOTAL			PLAN YEAR
1	USS DWIGHT D. EISENHOWER (CVN 69)	AIRCRAFT CARRIER (NP)	NORFOLK, VA	524	4,476	5,000	95
2	USS FLINT (AE 32)	AMMUNITION SHIP	CONCORD, CA	83	271	354	95
3	USS MAUNA KEA (AE 22)	AMMUNITION SHIP	CONCORD, CA	25	196	221	95
4	USS SAFEGUARD (ARS 50)	SALVAGE SHIP	PEARL HARBOR, HI	28	82	110	95
5	USS SALVOR (ARS 52)	SALVAGE SHIP	PEARL HARBOR, HI	25	80	105	95
6	USS CIMARRON (AO 177)	OILER	PEARL HARBOR, HI	80	197	277	95
7	USS WILLAMETTE (AO 180)	OILER	PEARL HARBOR, HI	81	182	263	95
8	USS JOHN YOUNG (DD 973)	DESTROYER	SAN DIEGO, CA	25	311	336	95
9	USS CAPE COD (AD 43)	DESTROYER TENDER	SAN DIEGO, CA	429	1,136	1,565	95
10	USS MOUNT HOOD (AE 29)	AMMUNITION SHIP	CONCORD, CA	97	328	425	95
11	USS COMSTOCK (LSD 45)	DOCK LANDING SHIP	SAN DIEGO, CA	37	298	335	95
12	USS CURTIS WILBUR (DDG 54)	GUIDED MISSILE DESTROYER	SAN DIEGO, CA	23	328	351	95

Table 1. --Continued-- A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	NUI PERSONI WOMEN		<b>IGNED</b>	PLAN YEAR
13	USS CORONADO (AGF 11)	MISC COMMAND SHIP	SAN DIEGO, CA	63	602	665	95
14	USS RAINIER (AOE 7)	FAST COMBAT SUPPORT SHIP	BREMERTON, WA	74	507	581	95
15	USS SUPPLY (AOE 6)	FAST COMBAT SUPPORT SHIP	NORFOLK, VA	7	594	601	95
16	USS MONONGAHELA (AO 178)	OILER	NORFOLK, VA	98	202	300	95
17	USS GRASP (ARS 51)	SALVAGE SHIP	LITTLE CREEK, VA	27	87	114	95
18	USS GRAPPLE (ARS 53)	SALVAGE SHIP	LITTLE CREEK, VA	36	67	103	95
19	USS PLATTE (AO 186)	OILER	NORFOLK, VA	85	183	268	95
20	USS SANTA BARBARA (AE 28)	AMMUNITION SHIP	CHARLESTON, SC	89	294	383	95
21	USS MOUNT BAKER (AE 34)	AMMUNITION SHIP	CHARLESTON, SC	72	292	364	95
22	USS SHENANDOAH (AD 44)	DESTROYER TENDER	NORFOLK, VA	504	1,043	1,547	95
23	USS BARRY (DDG 53)	GUIDED MISSILE DESTROYER	NORFOLK, VA	22	321	343	95
24	USS FRANK CABLE (AS 40)	SUBMARINE TENDER	CHARLESTON, SC	311	923	1,234	95
25	USS YELLOWSTONE (AD 41)	DESTROYER TENDER	NORFOLK, VA	428	947	1,375	95
26	USS CAMDEN (AOE 2)	OILER	BREMERTON, WA	69	576	645	95
27	USS DETROIT (AOE 4)	FAST COMBAT SUPPORT SHIP	EARLE, NJ	66	549	615	95

Table 1. --Continued-- A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	PERSON	NUMBER OF PERSONNEL ASSIGNED WOMEN MEN TOTAL		
28	USS DIXON (AS 37)	SUBMARINE TENDER	SAN DIEGO, CA	397	981	1,378	95
29	USS L. Y. SPEAR (AS 36)	SUBMARINE TENDER	NORFOLK, VA	395	1,037	1,432	95
30	USS KISKA (AE 35)	AMMUNITION SHIP	CONCORD, CA	76	321	397	95
31	USS LASALLE (AGF 3)	MISC COMMAND SHIP	GAETA, IT	57	403	460	95
32	USS SIMON LAKE (AS 33)	SUBMARINE TENDER	SARDINIA, IT	342	798	1,140	95
33	USS HOLLAND (AS 32)	SUBMARINE TENDER	GUAM	360	1,021	1,381	95
34	USS SHASTA (AE 33)	AMMUNITION SHIP	CONCORD, CA	78	334	412	95
35	USS EMORY S. LAND (AS 39)	SUBMARINE TENDER	NORFOLK, VA	507	1,084	1,591	95
36	USS MCKEE (AS 41)	SUBMARINE TENDER	SAN DIEGO, CA	438	1,128	1,566	95
37	USS MOUNT WHITNEY (LCC 20)	AMPHIBIOUS SHIP	NORFOLK, VA	93	587	680	95
38	USS SACRAMENTO (AOE 1)	FAST COMBAT SUPPORT SHIP	BREMERTON, WA	69	549	618	95
39	USS RUSHMORE (LSD 47)	AMPHIBIOUS DOCK LANDING SHIP	SAN DIEGO, CA	4	335	339	96
40	USS TORTUGA (LSD 46)	AMPHIBIOUS DOCK LANDING SHIP	LITTLE CREEK, VA	28	270	298	96
41	USS KEARSARGE (LHD 3)	AMPHIBIOUS ASSAULT (MP)	NORFOLK, VA	8	1,122	1,130	96
42	USS ARCTIC (AOE 8)	FAST COMBAT SUPPORT SHIP	NORFOLK, VA	103	445	548	96

Table 1. --Continued-- A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	PERSON	NUMBER OF PERSONNEL ASSIGNED WOMEN MEN TOTAL		PLAN YEAR
43	USS ASHLAND (LSD 48)	AMPHIBIOUS DOCK LANDING SHIP	LITTLE CREEK, VA	37	287	324	96
44	USS BRISCOE (DD 977)	DESTROYER	NORFOLK, VA	40	276	316	96
45	USS HAYLER (DD 997)	DESTROYER	NORFOLK, VA	36	272	308	96
46	USS LABOON (DDG 58)	GUIDED MISSILE DESTROYER	NORFOLK, VA	17	.307	324	96
47	USS MOOSBRUGGER (DD 980)	DESTROYER	MAYPORT, FL	21	282	303	96
48	USS DAVID R. RAY (DD 971)	DESTROYER	EVERETT, WA	4	298	302	96
49	USS KINKAID (DD 965)	DESTROYER	SAN DIEGO, CA	35	295	330	96
50	USS OLDENDORF (DD 972)	DESTROYER	SAN DIEGO, CA	4	311	315	96
51	USS ESSEX (LHD 2)	AMPHIBIOUS ASSAULT (MP)	SAN DIEGO, CA	11	1,114	1,125	96
52	USS ABRAHAM LINCOLN (CVN 72)	AIRCRAFT CARRIER (NP)	BREMERTON, WA	309	2,906	3,215	96
53	USS FLETCHER (DD 992)	DESTROYER	PEARL HARBOR, HI	37	311	348	96
54	USS CONSTELLATION (CV 64)	AIRCRAFT CARRIER	SAN DIEGO, CA	5	2,911	2,916	96
55	USS SEATTLE (AOE 3)	FAST COMBAT SUPPORT SHIP	EARLE, NJ	76	537	613	96
56	USS NIMITZ (CVN 68)	AIRCRAFT CARRIER (NP)	BREMERTON, WA	238	2,854	3,092	96
57	USS BUTTE (AE 27)	AMMUNITION SHIP	EARLE, NJ	39	303	342	96

Table 1. --Continued-- A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	NUI PERSONI WOMEN		<u>IGNED</u>	PLAN YEAR
58	USS SAIPAN (LHA 2)	AMPHIBIOUS ASSAULT (GP)	NORFOLK, VA	7	944	951	96
59	USS NASSAU (LHA 4)	AMPHIBIOUS ASSAULT (GP)	NORFOLK, VA	4	1,039	1,043	96
60	USS PAUL F. FOSTER (DD 964)	DESTROYER	EVERETT, WA	39	314	353	96
61	USS PELELIU (LHA 5)	AMPHIBIOUS ASSAULT (GP)	SAN DIEGO, CA	4	1,029	1,033	96
62	USS KITTY HAWK (CV 63)	AIRCRAFT CARRIER	SAN DIEGO, CA	33	3,178	3,211	96
63	USS BELLEAU WOOD (LHA 3)	AMPHIBIOUS ASSAULT (GP)	SASEBO, JA	3	1,075	1,078	96
64	USS BLUE RIDGE (LCC 19)	AMPHIBIOUS COMMAND SHIP	YOKOSUKA, JA	104	681	785	96
65	USS FORT MCHENRY (LSD 43)	AMPHIBIOUS DOCK LANDING SHIP	SASEBO, JA	32	275	307	96
66	USS BENFOLD (DDG 65)	GUIDED MISSLE DESTROYER	SAN DIEGO, CA	41	321	362	96
67	USS JOHN F. KENNEDY (CV 67)	AIRCRAFT CARRIER	MAYPORT, FL	169	2,434	2,603	96
68	USS MERRIMACK (AO 179)	OILER	NORFOLK, VA	93	185	278	96
69	USS TARAWA (LHA 1)	AMPHIBIOUS ASSAULT (GP)	SAN DIEGO, CA	6	944	950	96
70	USS JOHN C. STENNIS (CVN 74)	AIRCRAFT CARRIER (NP)	NORFOLK, VA	285	2,752	3,037	96
71	USS O'BANNON (DD 987)	DESTROYER	MAYPORT, FL	3	350	353	NP*
72	USS THE SULLIVANS (DDG 68)	GUIDED MISSILE DESTROYER	TBD	9	341	350	NP*

Table 1. --Continued-- A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	NUI PERSONI WOMEN		<u>IGNED</u>	PLAN YEAR
73	USS STUMP (DD 978)	DESTROYER	NORFOLK, VA	32	318	350	NP*
74	USS ROSS (DDG 71)	GUIDED MISSILE DESTROYER	TBD	2	348	350	NP*
75	USS BATAAN (LHD 5)	AMPHIBIOUS ASSAULT (MP)	NORFOLK, VA	2	1,128	1,130	NP*
76	USS ENTERPRISE (CVN 65)	AIRCRAFT CARRIER (NP)	NORFOLK, VA	1	3,214	3,215	NP*
77	USS GEORGE WASHINGTON (CVN 73)	AIRCRAFT CARRIER (NP)	NORFOLK, VA	4	3,086	3,090	NP*
78	USS MILIUS (DDG 69)	GUIDED MISSILE DESTROYER	NORFOLK, VA	12	325	337	NP*
79	USS HARRY S. TRUMAN (CVN 75)	AIRCRAFT CARRIER (NP)	NORFOLK, VA	9	3,081	3,090	NP*
80	USS T. ROOSEVELT (CVN 71)	AIRCRAFT CARRIER (NP)	NORFOLK, VA	3	3,087	3,090	NP*
81	USS HOPPER (DDG 70)	GUIDED MISSILE DESTROYER	SAN DIEGO, CA	4	346	350	NP*
82	USS BOXER (LHD 4)	AMPHIBIOUS ASSAULT (MP)	SAN DIEGO, CA	8	1,122	1,130	NP*
83	USS VELLA GULF (CG 72)	GUIDED MISSILE CRUISER	NORFOLK, VA	37	320	357	NP*
84	USS KILAUEA (AE 26)	AMMUNITION SHIP	CONCORD, CA	14	385	399	NP*
85	USS GOMPERS (AD 37)	DESTROYER TENDER	NORFOLK, VA	1	1,536	1,537	NP*
86	USS WASP (LHD 1)	AMPHIBIOUS ASSAULT (MP)	NORFOLK, VA	10	1,120	1,130	NP*
87	USS GUNSTON HALL (LDS 44)	AMPHIBOUS DOCK LANDING SHIP	LITTLE CREEK, VA	37	298	335	NP*

Table 1. --Continued-- A Comprehensive Listing of Eligible U.S. Navy Ships, Ship Types, and Crew Sizes by Gender, U.S. Navy Women Aboard Ship Study, 15 NOV 1994 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	SHIP TYPE	HOME PORT	NUI PERSONI WOMEN		<u>IGNED</u>	PLAN YEAR
88	USS PUGET SOUND (AS 37)	DESTROYER TENDER	NORFOLK, VA	5	1,055	1,060	NP*
89	USS GERMANTOWN (LSD 42)	DOCK LANDING SHIP	SASEBO, JA	8	327	335	NP*
90	USS CHANCELLORSVILLE (CG 62)	GUIDED MISSILE CRUISER	SAN DIEGO, CA	TBD	358	358	NP*
91	USS HIGGINS (DDG 76)	GUIDED MISSILE DESTROYER	SAN DIEGO, CA	TBD	350	350	NP*
92	USS DECATUR (DDG 73)	GUIDED MISSILE DESTROYER	SAN DIEGO, CA	TBD	350	350	NP*
	TOTALS			8,293	76,767	85,060	

<sup>\*</sup>NP - Not Planned. Due to limited fiscal resources, these ships were not surveyed.

## 2.2 <u>U.S. Navy Shipboard Health Follow-up Survey Development.</u>

Several methods were used for the development of the U.S. Navy Shipboard Health Follow-up Survey; these included: (1) review of the year-one survey and the lessons learned during its initial use, (2) bringing together of subject-matter experts who were involved in the year one research in workshops, (3) elucidation of major issues and preliminary results requiring follow up questions, and (4) further review of Navy requirements concerning the level of women's health and access to health care.

Because a wide range of data elements are involved in the U.S. Navy Shipboard Health Follow-up Survey, a single survey instrument encompassing all elements would be too long for completion within a reasonable period of time. Therefore, a set of essential core items was identified for completion by all subjects, and the remainder of the data elements were divided among four versions of the instrument for each gender. The U.S. Navy Shipboard Health Follow-up Survey has four alternate forms for women; Forms Women-A, Women-B, Women-C, and Women-D as well as four alternate forms for men; Forms Men-A, Men-B, Men-C, and Men-D. (Appendix C contains a complete set of these forms.)

#### 2.3 <u>U.S. Navy Shipboard Health Follow-up Survey Administration</u>.

Locating the Follow-up Survey Population. The year two Follow-up Survey was conducted as a mailing to individuals who were initially surveyed at least 12 months ago. Ships were scheduled based on ship class and type to obtain a representative sampling. A roster of the original (year one) survey respondents was compared with a current ship roster in order to determine whether the targeted individual was still on board ship or had been re-assigned to another duty station. If he or she was still on board, the Follow-up Survey was included in a packet sent to that ship. If the individual had been transferred, a follow-up packet was mailed to the individual's present command. If the individual was no longer on active duty, a note was added to the file that he or she was no longer on active duty and no further attempt was made at this point to follow-up.

<u>Pilot Testing Plan for the Follow-up Survey</u>. One ship was identified to pilot test the Follow-up Survey instrument. The Follow-up Survey was administered aboard the USS CORONADO in San Diego, California and the results were examined for clarity of questions, completeness of responses and general effectiveness of the instrument. The pilot survey was then converted to an electronic file and was examined for any unanticipated technical difficulties. The Follow-up Survey was adjusted based on the results of the pilot survey.

TWA Flight 800 Recovery Operations. A special version of the Follow-up Survey, which included questions related to post traumatic distress, was developed for the USS GRASP and the USS GRAPPLE, the two salvage ships involved with recovery of TWA Flight 800.

<u>Medical Department Interview Update</u>. A medical department guided discussion update was sent to the medical department of each ship at the same time the follow-up survey packets were sent or administered.

#### 2.4 Sick Call Visit Ascertainment.

Two methods of ascertainment of sick call visits aboard ships were used in conjunction with each other during year two of this study. Initially, upon enrollment in this study, a ship was provided with a NHRC Sick Call Log. The ship implemented the use of the log immediately upon receipt and maintained the log until a site visit was accomplished. During the site visit, the second method of ascertaining sick call visits aboard ship was accomplished by downloading medical encounter data files which were entered into the Shipboard Automated Medical System (SAMS). If these files contained the data requested on the Sick Call Logs, the use of the Sick Call Logs was discontinued and SAMS was used as the primary source of data collection. If it was determined that the data files on SAMS were inadequate or incomplete, then both methods of data collection were employed.

#### 2.5 <u>Medical Department Structured Discussions Update.</u>

Based on the results obtained during year one discussions with medical department personnel, a structured discussion update was developed and provided to the Medical Department when the Follow-up Survey instruments were provided. In addition, the year one (baseline) Medical Department Structured Discussion was conducted with each ship that was being surveyed for the first time during year two of the project.

<u>Subjects</u>. Eligible participants in this part of the study were U.S. Navy medical personnel serving aboard ship. Eligible participants included all the ship's medical department senior personnel. The titles of the eligible participants included: Senior Medical Officer (SMO), Medical Officer (MO), Independent Duty Corpsman (IDC), and Senior Medical Department Representative (SMDR).

**Discussion** guidelines. Discussion guidelines were used to elicit responses from The interview was divided into seven sections: Human Resources, Fiscal and Equipment Resources, Automated Data Processing (ADP) Resources, Logs and Records, Morbidity and Incidence Data, Health Care Provider Issues, and Training and Education/Health Awareness. The Human Resources section asked about manpower resources allocated to the medical department. The Fiscal and Equipment Resources section asked about the adequacy of the medical department's budget, Authorized Medical Allowance List (AMAL), pregnancy testing, and solicits recommendations for AMAL changes to enhance the health care provided for women aboard ship. The ADP Resources section was designed to determine the level of computer sophistication and utilization of the Shipboard Automated Medical Systems (SAMS) in medical departments. The Logs and Records section identified the nature of record keeping in medical departments. The Morbidity and Incidence Data section attempted to determine the total medical department's daily caseload, female daily caseload, pregnancy testing and occurrence, sexually transmitted disease (STD) incidence, and medical evacuation (MEDEVAC) frequency. The Health Care Provider Issues section was designed to evaluate, from a provider's perspective, feelings about their ability to provide adequate health care for a ship's female patient population. This included the physical environment of the medical department, obstetrical and gynecological (OB/GYN) services, pregnancy testing, and contraceptive availability. The Training and Education/Health Awareness section was designed to provide information about the health training and education available aboard ship. Finally, medical department personnel, including health care providers, were asked for their "comments, concerns, and/or recommendations" and their opinion of the "major issues facing women aboard ship." The question asking for "comments, concerns, and/or recommendations" was asked once after the first half of the interview and again at the end of the interview.

#### 2.6 <u>Development of Reports.</u>

During the first workshop of year two, collaborators met to discuss the preliminary results of the year one studies, to identify additional data to be gathered by incorporation into the year two

Follow-up Surveys, and to define specific hypotheses, topic areas and analysis plans for year two. Ten topic areas were defined, and proposed lead authors were identified. Since the time of that meeting, the participants have provided a review of the relevant literature in their proposed topic areas, as well as an abstract, hypotheses, detailed analysis plans including sample size calculations, and proposed statistical procedures for conducting their year two research. (Appendix B contains the proposed analysis plans from each lead author for the research topics.)

#### 3.0 RESULTS

The final results for year two of the study indicate success in meeting the objectives and milestones set forth in the year two project plan. This section contains the final accomplishments regarding ships surveyed, sick call data obtained, and medical department personnel interviews conducted. It also contains a brief summary for each of the report topic areas of the year two study.

#### 3.1 Results I: Accomplishments

# 3.1.1 <u>U.S. Navy Shipboard Health Survey and Anonymous Health and Behavior Supplemental.</u>

<u>Status of ship surveys</u>. A total of 30 additional ships have been surveyed during year two. Table 2 shows the 30 ships that have been surveyed for this reporting period and provides response rates by gender. For some of the ships that have been surveyed, response rates are not provided because data entry is still being performed.

Table 2. U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Ship type, Number of Surveys, and Response Rates by Gender, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY		NUMBER OF PERSONNEL ASSIGNED						ARTICIPATING EN* TOTAL		
1	(SHIP TYPE)		WOMEN	MEN	TOTAL	No.	%	No.	%	No.	%	
1	USS KEARSARGE (LHD 3) (AMPHIBIOUS ASSAULT (MP))	06 FEB 96	8	1,122	1,130	5	63	6	75	11	69	
2	USS ARCTIC (AOE 8) (FAST COMBAT SUPPORT SHIP)	07 FEB 96	103	445	548	35	34	31	30	66	32	

Table 2. --Continued-- U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Ship type, Number of Surveys, and Response Rates by Gender, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY	1	JMBER O		<u>]</u> WON			ARTICII EN*	I <u>PATING</u> TOTAL		
	(SHIP TYPE)		WOMEN	MEN	TOTAL	No.	%	No.	%	No.	<b>-</b> %	
3	USS ASHLAND (LSD 48) (AMPHIBIOUS DOCK LANDING SHIP)	07 FEB 96	37	287	324	31	84	34	92	65	88	
4	USS BRISCOE (DD 977) (DESTROYER)	07 FEB 96	40	276	316	30	75	30	75	60	5	
5	USS HAYLER (DD 997) (DESTROYER)	08 FEB 96	36	272	308	22	61	26	72	48	67	
6	USS LABOON (DDG 58) (GUIDED MISSILE DESTROYER)	08 FEB 96	17	307	324	10	59	8	47	18	53	
7	USS MOOSBRUGGER (DD 980) (DESTROYER)	15 FEB 96	21	282	303	8	38	14	67	22	52	
8	USS DAVID R. RAY (DD 971) (DESTROYER)	22 FEB 96	4	298	302	4	100	4	100	8	100	
9	USS KINKAID (DD 965) (DESTROYER)	22 FEB 96	35	295	330	27	77	24	69	51	73	
10	USS OLDENDORF (DD 972) (DESTROYER)	26 FEB 96	4	311	315	3	75	5	125	8	88	
11	USS ESSEX (LHD 2) (AMPHIBIOUS ASSAULT (MP))	29 FEB 96	11	1,114	1,125	11	100	7	64	18	82	
12	USS ABRAHAM LINCOLN (CVN 72) (AIRCRAFT CARRIER (NP)	17 MAR 96	309	2,906	3,215	240	78	249	81	489	79	

Table 2. --Continued-- U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Ship type, Number of Surveys, and Response Rates by Gender, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP	DATE OF		MBER C		PERSONNEL PARTICIPATING WOMEN MEN* TOTAL					
	(HULL NUMBER) (SHIP TYPE)	SURVEY	PERSON WOMEN			No.	<u>#EN</u>	No.	<u>EN*</u>	No.	<u>AL</u>
13	USS FLETCHER (DD 992) (DESTROYER)	19 MAR 96	37	311	348	TBD	TBD	TBD	TBD	TBD	TBD
14	USS CONSTELLATION (CV 64) (AIRCRAFT CARRIER)	10 APR 96	5	2,911	2,916	3	60	4	80	7	70
15	USS SEATTLE (AOE 3) (FAST COMBAT SUPPORT SHIP)	23 APR 96	76	537	613	61	80	53	70	114	75
16	USS NIMITZ (CVN 68) (AIRCRAFT CARRIER (NP)	06 MAY 96	238	2,854	3,092	196	82	196	82	392	82
17	USS BUTTE (AE 27) (AMMUNITION SHIP)	15 MAY 96	39	303	342	24	62	23	59	47	60
18	USS NASSAU (LHA 4) (AMPHIBIOUS ASSAULT (MP))	10 JUN 96	4	1,039	1,043	4	100	2	50	6	75
19	USS PAUL F. FOSTER (DD 964) (DESTROYER)	19 JUN 96	39	314	353	11	28	11	28	22	28
20	USS SAIPAN (LHA 2) (AMPHIBIOUS ASSAULT (GP))	02 JUL 96	7	944	951	1	14	2	29	3	21
21	USS PELELIU (LHA 5) (AMPHIBIOUS ASSAULT (GP))	22 JUL 96	4	1,029	1,033	2	50	3	75	5	63

Table 2. --Continued-- U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Ship type, Number of Surveys, and Response Rates by Gender, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY	NUMBER OF PERSONNEL ASSIGNED WOMEN MEN TOTAL		] WON			RTICIF EN*	IPATING TOTAL		
	(SHIP TYPE)		WOMEN	MEN	TOTAL	No.	%	No.	%	No.	%
22	USS KITTY HAWK (CV 63) (AIRCRAFT CARRIER)	30 JUL 96	33	3,178	3,211	22	67	15	45	37	56
23	USS BELLEAU WOOD (LHA 3) (AMPHIBIOUS ASSAULT (GP))	08 AUG 96	8	1,075	1,083	7	88	6	75	13	81
24	USS BLUE RIDGE (LCC 19) (AMPHIBIOUS COMMAND SHIP)	08 AUG 96	104	681	785	73	70	31	30	104	50
25	USS FORT MCHENRY (LSD 43) (AMPHIBIOUS DOCK LANDING SHIP)	08 AUG 96	32	275	307	27	84	21	66	48	75
26	USS JOHN J. KENNEDY (CV 67) (AIRCRAFT CARRIER)	17 SEP 96	169	2,434	2,603	102	60	116	69	218	64
27	USS BENFOLD (DDG 65) (GUIDED MISSILE DESTROYER)	07 NOV 96	41	321	362	14	34	11	27	25	30
28	USS JOHN C. STENNIS (CVN 74) (AIRCRAFT CARRIER (NP))	20 NOV 96	285	2,752	3,037	176	62	157	55	333	58
29	USS MERRIMACK (AO 179) (OILER)	TBD	93	185	278	TBD	TBD	TBD	TBD	TBD	TBD

Table 2. --Continued-- U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Ship type, Number of Surveys, and Response Rates by Gender, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY		NUMBER OF PERSONNEL ASSIGNED WOMEN MEN TOTAL			PERSON MEN		ARTICH EN*	<u>PATING</u> TOTAL		
	(SHIP TYPE)	:	WOMEN	MEN	TOTAL	No.	%	No.	%	No.	%	
30	USS TARAWA (LHA 1) (AMPHIBIOUS ASSAULT (MP))	TBD	6	944	950	TBD	TBD	TBD	TBD	TBD	TBD	
	TOTALS		1,845	30,002	31,847	1,149		2,690		3,839		
	MEDIAN						67		67		67	

<sup>\*</sup> One to one match, with two men eligible for each woman; participating percentage greater than 100.00 indicates more men participating at their request than originally selected. Total percentages do not take into account the additional men participating in the survey.

Table 3 shows the 30 ships that have completed the Anonymous Supplemental Health and Behavioral Survey during this reporting period and provides the response rate. For some ships that have been surveyed, response rates are not provided because data entry has not been completed.

Table 3. U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Anonymous Supplemental Health and Behavioral Survey, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY	1	JMBER O NEL ASSI MEN			ONNEL PARTICI ACTUAL (MEN+WOME)	
1	USS KEARSARGE (LHD 3)	06 FEB 96	8	1,122	1,130	16	11	69
2	USS ARCTIC (AOE 8)	07 FEB 96	103	445	548	206	65	32
3	USS ASHLAND (LSD 48)	07 FEB 96	37	287	324	74	64	86
4	USS BRISCOE (DD 977)	07 FEB 96	40	276	316	80	59	74
5	USS HAYLER (DD 997)	08 FEB 96	36	272	308	72	49	68

Table 3. --Continued-- U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Anonymous Supplemental Health and Behavioral Survey, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY	EY PERSONNEL ASSIGNED				ONNEL PARTICI ACTUAL	<u>PATING</u>
	(HOLL NONBER)	SORVET	WOMEN		TOTAL	TARGET	MEN+WOME	N) %
6	USS LABOON (DDG 58)	08 FEB 96	17	307	324	34	17	50
7	USS MOOSBRUGGER (DD 980)	15 FEB 96	21	282	303	42	22	52
8	USS DAVID R. RAY (DD 971)	22 FEB 96	4	298	302	8	8	100
9	USS KINKAID (DD 965)	22 FEB 96	35	295	330	70	47	67
10	USS OLDENDORF (DD 972)	26 FEB 96	4	311	315	8	8	100
11	USS ESSEX (LHD 2)	29 FEB 96	11	1,114	1,125	22	18	82
12	USS ABRAHAM LINCOLN (CVN 72)	17 MAR 96	309	2,906	3,215	618	477	77
13	USS FLETCHER (DD 992)	19 MAR 96	37	311	348	74	TBD	TBD
14	USS CONSTELLATION (CV 64)	10 APR 96	5	2,911	2,916	10	7	70
15	USS SEATTLE (AOE 3)	23 APR 96	76	537	613	152	109	72
16	USS NIMITZ (CVN 68)	06 MAY 96	238	2,854	3,092	476	393	83
17	USS BUTTE (AE 27)	15 MAY 96	39	303	342	78	47	60
18	USS NASSAU (LHA 4)	10 JUN 96	4	1,039	1,043	8	5	63
19	USS PAUL F. FOSTER (DD 964)	19 JUN 96	39	314	353	78	22	28
20	USS SAIPAN (LHA 2)	02 JUL 96	7	944	951	14	3	21

Table 3. --Continued-- U.S. Navy Ships Surveyed Using U.S. Navy Shipboard Health Survey, Anonymous Supplemental Health and Behavioral Survey, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	DATE OF SURVEY	PERSON	UMBER O	IGNED_		ONNEL PARTICI ACTUAL	
			WOMEN	MEN	TOTAL	TARGET	(MEN+WOME)	N) %
21	USS PELELIU (LHA 5)	22 JUL 96	4	1,029	1,033	8	5	63
22	USS KITTY HAWK (CV 63)	30 JUL 96	33	3,178	3,211	66	37	56
23	USS BELLEAU WOOD (LHA 3)	08 AUG 96	8	1,075	1,083	16	13	81
24	USS BLUE RIDGE (LCC 19)	08 AUG 96	104	681	785	208	101	49
25	USS FORT MCHENRY (LSD 43)	08 AUG 96	32	275	307	64	47	73
26	USS JOHN F. KENNEDY (CV 67)	17 SEP 96	169	2,434	2,603	338	214	63
27	USS BENFOLD (DDG 65)	07 NOV 96	41	321	362	82	25	30
28	USS JOHN C. STENNIS (CVN 74)	20 NOV 96	285	2,752	3,037	570	333	58
29	USS MERRIMACK (A0 179)	TBD	93	185	278	186	TBD	TBD
30	USS TARAWA (LHA 1)	TBD	6	944	950	12	TBD	TBD
	TOTALS		1,845	30,002	31,847	3,690	2,206	
	MEDIAN							63

## 3.1.2 Sick Call Data Obtained.

Sick call data has been obtained from 17 ships surveyed during year two, as listed in Table 4. The source of data and the period of collection are also listed by ship.

Table 4. Sick Call Encounters by Ship and Source of Encounter, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF CIMP	PERIOD AND SOURCE	E OF ENCOUNTER DATA
	NAME OF SHIP	SAMS	SICK CALL LOG
1	USS RUSHMORE	03/01/93 - 01/08/96	01/12/96 - 07/06/96
2	USS TORTUGA	01/01/92 - 12/31/94	06/06/95 - 06/05/96
3	USS KEARSARGE		01/08/96 - 07/13/96
4	USS LABOON	10/07/93 - 02/08/96	
5	USS KINKAID	·	02/08/96 - 02/22/96
6	USS OLDENDORF	11/20/91 - 02/16/96	
7	USS CONSTELLATION		03/05/96 - 07/15/96
8	USS SEATTLE		04/01/96 - 04/30/96
9	USS NIMITZ		01/01/96 - 06/01/96
10	USS BELLEAU WOOD		01/26/96 - 4/22/96
11	USS ARCTIC		02/28/96 - 08/28/96
12	USS ASHLAND		07/01/95 - 05/28/96
13	USS ESSEX		02/06/96 - 08/30/96
14	USS SAIPAN		06/12/96 - 09/30/96
15	USS PELELIU		06/10/96 - 09/26/96
16	USS BLUE RIDGE	06/28/95 - 08/06/96	07/16/96 - 09/30/96
17	USS MERRIMACK		06/01/95 - 09/30/95

## 3.1.3 Medical Department Structured Discussion Accomplishments.

Medical department personnel who participated in these discussions served aboard U.S. Navy ships where men and women were assigned for duty. Table 5 shows the ships and the dates on which the medical department discussions were completed and the categories of medical department personnel who participated in the discussions during the reporting period.

Table 5. U.S. Navy Ships Providing Medical Department Guided Discussions, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	NU PERSON WOMEN		SIGNED	DATE OF DISCUSSIONS	PA	NUMB PERSO RTICI MSC	ONNE PATI	ւ <u>۷G</u> *
1	USS BRISCOE (DD 977)	40	276	316	05 FEB 96				2
2	USS KEARSARGE (LHD 3)	8	1122	1130	06 FEB 96	1			1
3	USS ASHLAND (LSD 48)	37	287	324	07 FEB 96	1			1
4	USS LABOON (DDG 58)	17	307	324	08 FEB 96				1
5	USS MOOSBRUGGER (DD 980)	21	282	303	15 FEB 96				1
6	USS DAVID R. RAY (DD 971)	4	298	302	22 FEB 96				1
7	USS KINKAID (DD 965)	35	295	330	22 FEB 96		:		1
8	USS OLDENDORF (DD 972)	4	311	315	24 FEB 96				2
9	USS ESSEX (LHD 2)	11	1114	1125	26 FEB 96				1
10	USS FLETCHER (DD 992)	37	311	348	19 MAR 96				1
11	USS CONSTELLATION (CV 64)	5	2911	2916	10 APR 96		2		1
12	USS ABRAHAM LINCOLN (CVN 72)	309	2906	3215	16 APR 96				1
13	USS SEATTLE (AOE 3)	76	537	613	23 APR 96				1
14	USS NIMITZ (CVN 68)	238	2854	3092	06 MAY 96	5	1	1	2
15	USS NASSAU (DD 965)	4	1039	1043	04 JUN 96	1	1		2
16	USS SAIPAN (LHA2)	7	944	951	25 JUL 96	1			1

Table 5. --Continued-- U.S. Navy Ships Providing Medical Department Guided Discussions, U.S. Navy Women Aboard Ship Study, 01 FEB 1996 - 31 DEC 1996.

	NAME OF SHIP (HULL NUMBER)	PERSON	JMBER ( INEL ASS I MEN	SIGNED	DATE OF DISCUSSIONS	PAI	NUMB PERSC RTICI MSC	ONNEI PATIN	L <u><b>1G</b></u> *
17	USS KITTY HAWK (CV 63)	33	3,178	3,211	30 JUL 96	1			1
18	USS FORT McHENRY (LSD 43)	32	275	307	06 AUG 96	1			1
19	USS BLUE RIDGE (LCC 19)	104	681	785	07 AUG 96				1
20	USS PELELIU (LHA 5)	4	1,029	1,033	21 AUG 96	1			1
21	USS BELLEAU WOOD (LHA 3)	3	1,075	1,078	28 AUG 96	1			1
22	USS JOHN F. KENNEDY (CV 67)	169	2,434	2,603	09 SEP 96	1	1		
23	USS BENFOLD (DDG 65)	41	321	362	26 SEP 96				1
24	USS JOHN C. STENNIS (CVN 74)	285	2,752	3,037	20 NOV 96	1			1
25	USS TARAWA (LHA 1)	6	944	950	TBD				
26	USS MERRIMACK	93	185	278	TBD				
	TOTALS	1,623	28,668	30,291		15	5	1	27

<sup>\*</sup> MC = Medical Corps; MSC = Medical Service Corps; NC = Nurse Corps;

# 3.1.4 Report Development.

This section lists the report topics that were defined for study during year two. Appendix B contains the abstract, hypothesis, analysis plan, and literature review for each of the research reports.

HM = Hospital Corpsman

(1) <u>Report Topic</u>: Contraceptive Use and Attitudes Towards Family Planning in Navy Enlisted Women and Men.

<u>Proposed Lead Authors</u>: Marie D. Thomas, Ph.D., Patricia J. Thomas, M.S., and Frank C. Garland, Ph.D.

The year two report will discuss the replication of analyses performed in year one using an expanded sample of enlisted women. Where possible, comparisons will be made to data gathered with shore-based samples of Navy women. Responses to items on contraception and family planning attitudes that were added to the year one surveys will also be presented, using both the male and female samples. In addition to the descriptive statistics, the relationships among contraception use, psychosocial stress, life style behaviors, and pregnancy will be explored.

(2) <u>Report Topic</u>: Organizational Influences on Gender Differences in Stress and Strain Aboard U.S. Navy Ships.

**Proposed Lead Authors:** Ross R. Vickers, Jr., Ph.D. and James A. Martin, Ph.D., BCD

Women aboard U.S. Navy ships report slightly higher stress and strain than men aboard the same ships. The present study demonstrated that this trend is magnified aboard some ships and in some Navy ratings, but reversed in other ratings. Ship effects occurred because women aboard some ships reported higher than average stress, while men aboard the same ships reported lower than average stress. Rating effects occurred because men reported lower than average stress in some jobs commonly held by women (e.g., storekeeper), but higher than average stress in some traditionally male jobs (e.g., signalman, quartermaster). Women reported average stress in each job. The processes underlying gender differences may be different in each ship or rating. This inference derives from the fact that different combinations of stress indicators were affected on each ship and in each rating. Ship assignment and rating should be considered to fully understand Navy gender differences in stress, but studies of specific ships and ratings will be needed to understand the processes producing those gender differences

(3) <u>Report Topic</u>: Stress and Well-being of Women Serving Aboard Navy Ships. <u>Proposed Lead Authors</u>: James A. Martin, Ph.D., BCD, Gregory A. Acevedo, M.S., and Frank C. Garland, Ph.D.

This collaborative effort is focused on analyses of military related psychosocial stress factors and their relationship to physical and psychological health, personal and family well being, and duty performance of personnel in the Women Aboard Navy Ships study. This effort includes the validation of a brief survey measure of psychological distress for use in large scale Navy surveys where space and subject burden are of concern. This effort makes use of the complete year 1 data and builds on an earlier analysis of psychosocial data from the first phase of data collection. Within rank and gender comparisons will be used

go examine the impact of duty (and other military related) stressors on various aspects of psychosocial health, well being, and perceived military performance. Initial analysis demonstrated some across rank and gender differences, but only a few, minor within rank and gender group differences for a variety of biopsychosocial outcomes measures. This effort expands the earlier analysis to include a variety of perceived and objective health outcomes.

(4) <u>Report Topic</u>: Occupational and Environmental Factors Associated with Upper Respiratory Disease Symptoms Among Active Duty Men and Women Aboard U.S. Navy Ships.

Proposed Lead Authors: Edward D. Gorham, M.P.H., Cedric F. Garland, Dr. P.H., Abram S. Benenson, M.D., Frank C. Garland, Ph.D., Gregory C. Gray, CDR, MC, USN, Deborah L. Wingard, Ph.D., Craig A. Molgaard, Ph.D., and David Macky, Ph.D.

The second year analysis plans in this study will build upon year one analyses of occupational and environmental exposures and upper respiratory infection (URI) symptoms with the addition of sick call visit discharge diagnoses. These diagnoses will include ICD-9 codes 461-466, and 480, which corresponds to URIs due to a variety of viral agents, including parainfluenza viruses, adenoviruses, rhinoviruses respiratory syncytial virus, and some coronaviruses, coxsackievirus, and echoviruses.

(5) <u>Report Topic</u>: Gender Differences in Predicting Cigarette Smoking Among Navy Shipboard Women and Men.

Proposed Lead Author: Terry L. Conway, Ph.D., and Frank C. Garland, Ph.D.

The Department of the Navy emphasizes the need for healthful life styles and reduction of health risk factors as a part of on going health promotion efforts. One area of considerable concern is tobacco use because military personnel are more likely than their civilian counterparts to smoke. Research has show that men and women have different experiences in smoking initiation, maintenance, and cessation; thus, specialized interventions to help women and men may be warranted. The primary objectives of this paper will focus on determining correlates of current tobacco use and intentions to smoke a year from now. Understanding the factors associated with tobacco use, including differences in men and women, should help provide information useful for designing more effective interventions to reduce tobacco use among Navy shipboard personnel.

(6) <u>Report Topic</u>: Gender Differences in the Association of Life Style Factors to the Prevalence and Symptoms of Migraines and other Headaches Among Navy Personnel. <u>Proposed Lead Authors</u>: Deborah L. Wingard, Ph.D., Donna Kritz-Silverstein, Ph.D., and Frank C. Garland, Ph.D.

During year two, gender differences in (a) the experience of migraines and other headaches, and, if time permits, (b) injury rates within specific job classifications, will be investigated.

(7) <u>Report Topic</u>: The Association of Behavior and Life Style Factors with Menstrual Symptoms.

Proposed Lead Authors: Donna Kritz-Silverstein, Ph.D., Deborah L. Wingard, Ph.D., and Frank C. Garland, Ph.D.

This study is designed to expand on previous studies. It will examine the association of obesity, cigarette smoking, alcohol consumption and exercise with the prevalence of menstrual cycle disorders among a large population based sample of women in the Navy.

(8) <u>Report Topic</u>: Predicting the Health of Navy Service Women and Men. <u>Proposed Lead Authors</u>: Dorothy J. Jeffreys, Ph.D., Theresa Russo, Ph.D. and Frank C. Garland, Ph.D.

This study will investigate the appropriateness of different models for predicting the physical and/or emotional health by family composition, developmental stage of children and gender for Navy service members assigned to ships. Other factors hypothesized to affect the service members' health are stress, distress, and formal and informal supports. Covariates also believed to affect the service members' health are demographic (e.g., age, race, and education), and military information (e.g., paygrade, length of service, and deployment).

(9) <u>Report Topic</u>: Normative Comparisons of Psychological Symptomatology in Navy and Army Women and Men: Effects of Gender, Demographic Characteristics, and Deployment History

Proposed Lead Authors: Kathleen M. Wright, Ph.D. and Frank C. Garland, Ph.D.

This study will address establishing appropriate symptom norms for service members and compare the effects of deployment for large sample across a wide variety of operations.

(10) Report Topic: Availability of Gynecological Supplies and Other Issues Related to the Reporting Requirements of the Department of the Navy's Policy on Pregnancy.

Proposed Lead Authors: Frank C. Garland, Ph.D., David Timberlake, M.P.H., and Diana R. Simmes, M.P.H.

This year two report will address issues pertinent to the Department of the Navy's Policy on Pregnancy, including the availability of gynecological supplies, counseling, and gynecological appointments.

(11) Report Topic: Descriptive Tables of Demographic Characteristics, Family Structure, Women's Health Related Issues, and Occupational Exposures of Personnel Participating in the U.S. Navy Women Aboard Ship Study.

Proposed Lead Authors: Frank C. Garland, Ph.D., David Timberlake, M.P.H., and Diana R. Simmes, M.P.H.

This report will present demographic and other characteristics of the population participating in the U.S. Navy Women Aboard Ship Study, a project conducted as part of the Defense Women's Health Research Program. This tabular presentation will focus on 4 topic areas: (1) demographic characteristics, (2) family structure, (3) women's health-related issues, and (4) occupational exposures.

(12) <u>Report Topic</u>: Expected Occurrence of Ectopic Pregnancies and Spontaneous Abortions During the First 20 Weeks of Pregnancy in Navy Women Serving Aboard Ship.

<u>Proposed Lead Author</u>: Frank C. Garland, Ph.D., Edward D. Gorham, M.P.H., Cedric F. Garland, Dr. P.H., D. Stephen Nice, Ph.D.

In order to determine the expected number of ectopic pregnancies and spontaneous abortions in the first 20 weeks of pregnancy in women aboard ship, data were obtained from three studies of reproductive outcomes in active-duty U.S. Navy women: (1) the Hospitalized Pregnancy Study, (2) the Women Aboard Ship Study, and (3) the Enlisted Personnel Pregnancy Study. Each study had unique advantages for the purpose of estimation of expected numbers of events. The overall pregnancy rate in women assigned aboard ship in the 53 ships available from the Women Aboard Ship Study was 19 per 100 woman-years, with the highest mean rates reported for submarine tenders (27 per 100 woman-years) and the lowest mean rates for amphibious assault ships (0 per 100 woman-years).

#### 3.2 Results II: Findings

This section presents brief summaries of year two study results grouped by major topic area. Full reports are presented in Appendix D.

#### 3.2.1 Major Topic Area: Family Planning and Pregnancy Issues

Report Summary: Contraceptive Use and Attitudes Towards Family Planning in Navy Enlisted Women and Men (Appendix D.1).

In addition to the Women Aboard Navy Ships survey package completed by over 5,700 personnel assigned aboard U.S. Navy ships, 714 enlisted women and 665 enlisted men on 15 ships completed a Family Planning Supplement, which assessed use of contraception and attitudes toward family planning. For this sample, contraceptive use was related to age and marital status, with young unmarried personnel more likely to take measures to prevent pregnancy than their older married shipmates. More favorable family planning attitudes were related to contraceptive use. Depression, shipboard stress, or job quality of life were not related to use of birth control. Women and men differed in their attitudes toward family planning, with women's responses more positive than men's.

<u>Report Summary:</u> Availability of Gynecological Supplies and Other Issues Related to the Reporting Requirements of the Department of the Navy's Policy on Pregnancy (Appendix D.6).

This report addresses issues pertinent to the Department of Navy's Policy on Pregnancy. The U.S. Navy Shipboard Health Survey and the Anonymous Supplemental Health and Behavioral Survey were administered as part of the U.S. Navy Women Aboard Ship Study. A total of 2,914 women provided information pertaining to the availability of gynecological supplies, counseling, and gynecological appointments. A majority of the women who needed birth control pills, 82.4%, either agreed or strongly agreed that birth control pills were readily available. In contrast, only 7.8% of the women either disagreed or strongly disagreed that birth control pills were readily available. 63.2 % percent of the women who needed counseling for birth control methods either agreed or strongly agreed that such counseling was readily available. In contrast, 12.2% of the women surveyed either disagreed or strongly disagreed that counseling for birth control methods was readily available. A total of 2,739 women provided information pertaining to pregnancy in the Anonymous Supplemental Health and Behavioral Survey. Of the 391 total women who suspected being pregnant, 274 (70.1%) women had a pregnancy test. Of the 66 total women who suspected being pregnant and had a positive test result, 57 (86.4%) women informed their commanding officer.

<u>Report Summary</u>: Expected Occurrence of Ectopic Pregnancies and Spontaneous Abortions During the First 20 Weeks of Pregnancy in Navy Women Serving Aboard Ship (Appendix D.8)

In order to determine the expected number of ectopic pregnancies and spontaneous abortions in the first 20 weeks of pregnancy in women aboard ship, data were obtained from three studies of reproductive outcomes in active-duty U.S. Navy women: (1) the Hospitalized Pregnancy Study, (2) the Women Aboard Ship Study, and (3) the Enlisted Personnel Pregnancy Study. Each study had unique advantages for the purpose of estimation of expected numbers of events. The overall pregnancy rate in women assigned aboard ship in the 53 ships available from the Women Aboard Ship Study was 19 per 100 woman-years, with the highest mean rates reported for submarine tenders (27 per 100 woman-years) and the lowest mean rates for amphibious assault ships (0 per 100 woman-years).

#### 3.2.2 Major Topic Area: Psychosocial Factors.

Report Summary: Stress and Well-being of Women Serving Aboard Navy Ships (Appendix D.2).

This report highlights descriptive psychosocial information from an important longitudinal study of the health and well-being of women assigned aboard Navy ships. Womens' increasing presence and evolving roles in the Navy makes this research important for Navy women and for overall military readiness. The experiences of these women were compared to the experiences of a matched sample of Navy men across both the enlisted and officer ranks. Over 40% of the men and women in this sample reported "quite a bit" or "an extreme amount" of stress in their current life with enlisted women reporting slightly more stress than enlisted men. However, the percentage of women officers reporting stress specifically associated with being aboard ship is less than the percentage for male officers. Additionally, men and women report that they are coping well with the stress, and that stress did not diminish their duty performance or personal life.

<u>Report Summary:</u> Normative Comparisons of Psychological Symptomatology in Navy and Army Women and Men: Effects of Gender, Demographic Characteristics and Deployment History (Appendix D.5).

This report describes the results of administration of the Brief Symptom Inventory (BSI) aboard U.S. Navy ships as a part of the Navy Women Aboard Ships Study. The BSI is a standardized instrument that measures psychological symptoms. It was administered to a 20% probability sample of women aboard 36 US. Navy ships during 1994-1996 and a comparison group of men, matched to the women on ship, work division, department, race (white, black, Hispanic, or other), paygrade, occupational rating, and date of birth. Overall, women scored significantly higher than men on the somatization, depression,

interpersonal sensitivity, and psychological trauma subscales, and on an index of general severity of psychological symptoms (GSI). Women who had deployed scored significantly lower than men who had deployed on obsessive-compulsive and hostility symptoms. There were no significant differences, however, between women and men who had deployed to the same location. The demographic comparisons revealed that women scored significantly higher on the GSI than men in the 19 and 24 year old age groups, the E - 2 and E - 4 pay grades, high school graduate and some college educational levels, and Pacific Islander and Native American ethnic groups, although the ethnic group differences should be interpreted with caution given the small sample sizes. Results of a stepwise multiple regression indicated that lower rank and ethnic group remained significant predictors of psychological distress for women. The only significant predictor for men was lower rank. Gender differences on psychological symptoms related to deployment history and demographic characteristics were also compared with several large Army data bases.

# Report Summary: Organizational Influences on Gender Differences in Stress and Strain Aboard U.S. Navy Ships (Appendix D.9).

The present study found that Women aboard U.S. Navy ships report slightly higher stress and strain than men aboard the same ships, and that this trend is magnified aboard some ships and in some Navy ratings, but reversed in other ratings. Ship effects occurred because women aboard some ships reported higher than average stress, while men aboard the same ships reported lower than average stress. Rating effects occurred because men reported lower than average stress in some jobs commonly held by women (e.g., storekeeper), but higher than average stress in some traditionally male jobs (e.g., signalman, quartermaster). Women reported average stress in each of these jobs. The processes underlying gender differences may be different in each ship or rating. This inference derives from the fact that different combinations of stress indicators were affected on each ship and in each rating. Ship assignment and rating were investigated to determine gender differences in stress. Studies of specific ships and ratings will be needed to understand the processes producing such gender differences.

### 3.2.3 Major Topic Area: Health Conditions and Life Style Factors.

# <u>Report Summary:</u> Gender Differences in the Association of Life Style Factors to the Prevalence and Symptoms of Migraines and Other Headaches Among Navy Personnel (Appendix D.3).

Many studies have noted that women report more headaches than men, and that migraines in particular occur most frequently among women between the ages of 25 and 55 years. However, relatively few studies have examined the association between life style characteristics and headaches of any type. Using data from a cross-sectional survey of 2,841 men and 2,914 women in the Navy between 1995 and 1996, the present study confirms a significant female excess in the prevalence of headaches and migraines, without

evidence of a gender difference in the presence or absence of an association between life style variables and headaches. The present study also suggested an increased risk of headaches associated with cigarette smoking and short sleep duration among both men and women, but no association with alcohol consumption, exercise, or obesity.

# <u>Report Summary:</u> The Association of Behavior and Life Style Factors with Menstrual Symptoms (Appendix D.4).

It has been estimated that 50-85% of women in the United States currently having menstrual periods experience dysmenorrhea and other menstrual or premenstrual symptoms, and that 3.5-7 million are incapacitated for one to two days each month because of these symptoms. Previous studies examining the association of behavioral and life style factors such as obesity, cigarette smoking, alcohol consumption and exercise with menstrual symptoms have yielded inconsistent results, with some showing a positive association and others showing either no association or a negative association. Because these life style factors are all potentially modifiable, the demonstration and elucidation of their associations with menstrual symptoms represents an important avenue of research. Most previous studies of the association of life style variables with menstrual disorders have relied on small clinic- or physician-based samples of women, or small samples of college students. There have been relatively few large, population-based studies of the association of behavioral and life style variables with dysmenorrhea or other menstrual symptoms. The present study examined the association of obesity, cigarette smoking, alcohol consumption and exercise with the prevalence of menstrual cycle disorders in a large population-based sample of women in the Navy. After adjustment for age and other potentially confounding covariates, current cigarette smoking was associated with increased risk of all menstrual symptoms and cycle disorders. Obesity, exercise and alcohol consumption did not show consistent associations with menstrual symptoms or cycle disorders. Results suggested that interventions targeted at smoking cessation might be useful to reduce the prevalence of menstrual symptoms, cycle disorders and time lost from work.

#### 3.2.4 Major Topic Area: Population Demographics.

Report Summary: Descriptive Tables of Demographic Characteristics, Family Structure, Women's Health Related Issues, and Occupational Exposures of Personnel Participating in the U.S. Navy Women Aboard Ship Study (Appendix D.7).

This report presents demographic and other characteristics of the population participating in the U.S. Navy Women Aboard Ship Study, a project conducted as part of the Defense Women's Health Research Program. This tabular presentation focuses on 4 topic areas: (1) demographic characteristics, (2) family structure, (3) women's health-related issues, and (4) occupational exposures. The population (N = 5,755) was predominately young (age < 30 years); approximately 50% were white and 30% were black. The population consisted

of 95.3% enlisted personnel, 0.1% warrant officers, and 4.6% officers. The majority of the population, 62.9%, had served 3 years or less aboard ship. The number of years served aboard ship varied by gender, as indicated by 73.8% of women and 51.6% of men having served 3 years or less. Marital status varied by gender; 49.1% of men reported not being currently married compared to 66.2% of women reporting not currently being married. Nearly three-fourths (72.1%) of married personnel reported having one or more children in their household. For all respondents, 14.3% of women and 7.0% of men reported being single parents. Women's health issues addressed in this report covered self-reported medical conditions and availability of Ob/Gyn supplies. The majority of women, (83.3%) reported not having been medically screened prior to deployment. The majority of women agreed that counseling for a range of medically-related issues was available. Availability of protective gear (i.e., gloves, respirators, ear plugs) for use in current job, proper fit of protective gear, use of protective gear when needed, and interference from the gear with ability to perform work are also reported.

#### 4.0 CONCLUSIONS

The second year of this study has met the objectives of (1) expanding the proportion of women who provided self-report information along with a matched set of men serving aboard ship, (2) obtaining sick call information, (3) conducting structured interviews without shipboard medical department staff, and (4) resurveying the participants of year one who are still on active duty. Year two research topics reflected a sample of the results obtained during year one and year two of the study and allowed the investigators to refine their hypotheses with the larger sample size (N=5,755).

Year two of this study has addressed a wide range of women's health-related issues including family planning, pregnancy, and menstrual symptoms. More general health issues that were also addressed included migraines, stress, psychological symptomatology and occupational exposures. The component studies of this project have yielded important insights into these complex issues. Moreover, the study as a whole provided information which will help to insure optimal health and readiness of all service members and will facilitate the policy development process. Topic-specific conclusions are provided in reports (Appendix D) addressing the major areas covered in this report.

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### **APPENDICES**

- A. Briefings and Presentations, Workshops
- B. Report Topics and Analysis Plans
- C. Health Data Collection Instruments
- D. Results

## APPENDIX A

Briefings and Presentations, Workshops

#### **BRIEFINGS/PRESENTATIONS**

#### 17 April 1996, Washington, D.C.

Frank C. Garland, Ph.D.

Federation of Applied Scientists and Experimental Biologists Annual Meeting "Recommendations for Research on the Health of Military Women: U.S. Navy Perspective"

#### 5 June 1996, San Antonio, Texas

Frank C. Garland, Ph.D.

The Committee on Women in the NATO Forces

"Status of Women's Health in the U.S. Navy"

#### 23 July 1996, San Diego, California

Frank C. Garland, Ph.D.

RADM Joan M. Engel

Director Navy Nurse Corps and Assistant Chief for Education, Training, and Personnel, Navy Bureau of Medicine and Surgery

#### 11 August 1996, Toronto, Canada

104th Annual Convention, American Psychological Association

"Health Care and Wellness Among U.S. Navy Women"

Chair and Discussant: Frank C. Garland, Ph.D.

Participants: Gregory F. Acevedo, Ph.D., "Psychological Well-Being of Women

Serving Aboard Navy Ships"; Ralph G. Burr, M.A., "U.S. Navy Women's

Satisfaction With Provided Health Care"; Dorothy J. Jeffreys, Ph.D., "Family

Composition: Correlates With the Health of Women Aboard Ships"; Patricia J.

Thomas, M.A., "Psychosocial and Behavioral Correlates of Pregnancy Aboard Navy Ships"; Michael J. Schwerin, Ph.D., "Health Beliefs Model in Shipboard Navy Men and Women".

#### 20 November 1996, New York, New York

Frank C. Garland, Ph.D.

124th Annual Meeting, American Public Health Association

"Women Aboard Navy Ships: A Comprehensive Health and Readiness Research Project"

#### 26 November 1996, Washington, D.C.

Frank C. Garland, Ph.D.

ADM W. H. Koenig, U.S. Navy Surgeon General

Expected Number of Advance Pregnancy Outcomes in Women Serving Aboard Ship Navy Bureau of Medicine and Surgery

26 November 1996, Washington, D.C.

Frank G. Garland, Ph.D.

Bernard Rostker, Ph.D., Assistant Secretary of the Navy (Manpower and Reserve Affairs), Pentagon

Expected Number of Adverse Pregnancy Outcomes in Women Serving Aboard Ship Navy Bureau of Medicine and Surgery

#### WOMEN ABOARD NAVY SHIPS WORKSHOP

April 10 and 11, 1996 San Diego, CA

Ralph Burr, M.A., Statistician

Naval Health Research Center

Ron Clapsaddle, Senior Computer Programmer/Analyst Ogden Government Services

Terry Conway, Ph.D., Research Director

Center for Behavioral and Community Health, San Diego State University

Cedric Garland, Dr. P.H., Associate Professor University of California, San Diego

Frank Garland, Ph.D., Department Head

Health Sciences and Epidemiology, Naval Health Research Center

Ed Gorham, M.P.H., Research Epidemiologist

Naval Health Research Center

Betty Gunderson, M.A., Administrative Coordinator Uniband, Inc.

Randall Hall, Research Data Manager

Management Assistance and Concepts Corporation

Dorothy Jeffreys, Ph.D., Professor

Marywood College Military Family Institute

Donna Kritz-Silverstein, Ph.D., Assistant Adjunct Professor University of California, San Diego

Alan Levine, Ph.D., R.D., Deputy Director of Research

Marywood College Military Family Institute

Jim Martin, Ph.D., BCD, Associate Professor

Bryn Mawr College

Lex Merrill, Ph.D., Clinical Research Psychologist

Naval Health Research Center

Rex Sanderson, Project Coordinator

Management Assistance and Concepts Corporation

Diane Schneider, M.D., Clinical Associate Professor

University of California, San Diego

LT Michael Schwerin, USN, MSC, Research Psychologist

Naval Health Research Center

Marie Thomas, Ph.D., Assistant Professor

California State University, San Marcos

Pat Thomas, M.A., Washington, D.C. Scientific and Customer Liaison

Navy Personnel Research and Development Center

David Timberlake, M.P.H., Research Epidemiologist

Management Assistance and Concepts Corporation

## Women Aboard Navy Ship Workshop p.2

Ross Vickers, Ph.D., Research Psychologist Naval Health Research Center Debbie Wingard, Ph.D., Associate Professor University of California, San Diego

# APPENDIX B

Report Topics and Analysis Plans

### APPENDIX B

## TENTATIVE REPORT TOPIC AREAS AND PROPOSED LEAD AUTHORS

B.1	Contraceptive Use and Attitudes Toward Family Planning in Navy Enlisted Women and Men Marie D. Thomas, Ph.D. Patricia J. Thomas, M.S. Frank C. Garland, Ph.D.	. B.1
B.2	Organizational Influences on Gender Differences in Stress and Strain Aboard U.S. Navy Ships Ross R. Vickers, Jr., Ph.D. James A. Martin, Ph.D., BCD	
B.3	Stress and Well-being of Women Serving Aboard Navy Ships James A. Martin, Ph.D., BCD Gregory A. Acevedo, M.S. Frank C. Garland, Ph.D.	. В.8
B.4	Occupational and Environmental Factors Associated With Upper Respiratory Disease Symptoms Among Active Duty Men and Women Aboard U.S. Navy Ships Edward D. Gorham, M.P.H. Cedric F. Garland, Dr. P.H. Abram S. Benenson, M.D. Frank C. Garland, Ph.D. Gregory C. Gray, CDR, MC, USN Deborah L. Wingard, Ph.D. Craig A. Molgaard, Ph.D. David Macky, Ph.D.	B.11
B.5	Gender Differences in Predicting Cigarette Smoking Among Navy Shipboard Women and Men Terry L. Conway, Ph.D. Frank C. Garland, Ph.D.	B.14
B.6	Gender Differences in the Association of Life Style Factors to the Prevalence and Symptoms of Migraines and Other Headaches Among Navy Personnel Deborah L. Wingard, Ph.D. Donna Kritz-Silverstein, Ph.D. Frank C. Garland, Ph.D.	B.18

B.7.	The Association of Behavior and Life Style Factors With Menstrual Symptoms Donna Kritz-Silverstein, Ph.D.  Deborah L. Wingard, Ph.D.  Frank C. Garland, Ph.D.	B.22
B.8	Predicting the Health of Navy Service Women and Men Dorothy J. Jeffreys, Ph.D. Theresa Russo, Ph.D.	
	Frank C. Garland, Ph.D	B.26
B.9	Normative Comparisons of Psychological Symptomatology for Navy and Army Women and Men: Effects of Gender, Deployment History and Demographic Effects Kathleen M. Wright, Ph.D. Frank C. Garland, Ph.D.	B.36
B.10	Availability of Gynecological Supplies and Other Issues Related to the Reporting Requirements of the Department of the Navy's Policy on Pregnancy Frank C. Garland, Ph.D. David Timberlake, M.P.H.	
	Diana R. Simmes, M.P.H.	B.41

# **B.1** REPORT TOPIC AREA: Contraceptive Use and Attitudes Towards Family Planning in Navy Enlisted Women and Men

**PROPOSED LEAD AUTHORS:** Marie D. Thomas, Ph.D., Patricia J. Thomas, M.S., and Frank C. Garland, Ph.D.

#### **ABSTRACT**

The Year Two report will discuss the replication of analyses performed in Year One using an expanded sample of enlisted women. Where possible, comparisons will be made to data gathered with shore-based samples of Navy women. Responses to items on contraception and family planning attitudes that were added to the Year One surveys will also be presented, using both the male and female samples. In addition to descriptive statistics, the relationships among contraceptive use, psyschosocial stress, lifestyle behaviors, and pregnancy will be explored.

#### **HYPOTHESES**

The outcome of pregnancies among women assigned to ships will not differ from the outcome for shore-based women.

Contraceptive use will be related to age, education, and marital status.

Contraceptive use also will be related to lifestyle behaviors, family planning attitudes, and self-reports of stress.

Proportionately more of the pregnancies of women under age 30 will have been unplanned than the pregnancies of older women.

Women and men differ in their attitudes toward family planning.

#### **ANALYSIS PLANS**

Because the focus of this report is on pregnancy, only one of the analyses will include the male sample, i.e., the comparison between the family planning attitudes of women and men. For the remaining analyses, the variables to be included are as follows:

#### Variables:

Independent Variables: Lifestyle behaviors and stress.

Dependent Variables: Pregnancy status, outcome of previous pregnancies, and contraceptive use.

Co-variables: Demographic characteristics, including age, educational level, marital status, parental status, pay grade, and assignment.

Family planning attitudes will be investigated as both independent and dependent variables, depending upon the hypothesis being tested.

#### Statistics:

Hypothesis testing will be conducted through the use of chi-square and t-tests, analysis of variance, and multi variate analysis of variance. The multi variate analytic techniques to determine patterns of relationship between and among variables of interest will include multiple regression and discriminant analysis.

#### LITERATURE REVIEW

This investigation builds upon the applied Navy sponsored research on pregnancy that began over a decade ago [1]. Problems associated with the management of pregnant personnel were the impetus for much of the research and studies that were conducted [2-6]. Although frequently not explicitly stated, concern over the reproductive health of women was, and continues to be, a motivating force behind Navy pregnancy research.

Quester [7] extracted the social security numbers of all women who had given birth in Navy hospitals between March 1992 and September 1993. The assignment codes of the mothers nine months prior to hospitalization were analyzed. The results indicated that the birthrate of women who had been assigned to ships was somewhat higher than that of women who had been assigned ashore. During Year One of the Women Aboard Navy Ships research project, Thomas and Thomas [8] found that the pregnancy rate of these women was lower than the pregnancy rate that had been reported by those authors for another ship-based sample [9]. Potential reasons for this difference could not be explored, however, because of the small number of pregnant women (N=73) in the Year One sample.

The outcome of the pregnancies of Navy women is a grave health issue. Self-reported data obtained through survey research indicates that Navy women obtain fewer elective abortions, but experience more miscarriages than their civilian counterparts [9]. Caldron and Hilton [10], in their analysis of 10 years of hospitalization data, found no relationship between duty station or rating and pregnancy outcome. Analysis of the responses of women in the Year One sample yielded results consistent with the earlier surveys [8].

Contraceptive behavior has been a difficult topic to research because of religious, moral, and privacy considerations. Nevertheless, the Navy in its role as primary medical provider for its personnel, has a compelling need to know whether women have access to effective birth control and are sufficiently informed about contraception to make wise choices. While Navy policy [11] states that pregnancy is compatible with a naval career, an unstated desire is that pregnancies be

planned to coincide with nonoperational tours. Surveys conducted among Navy women in 1988, 1990, and 1992 indicated that only about 40% of their pregnancies were planned [1,9]. The rate among the youngest women was much lower. Yet, over half of the women who experienced an unplanned pregnancy were using birth control. Analysis of Year One data from the Women in Navy Ships research project yielded very similar results [8].

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# **B.2** REPORT TOPIC AREA: Organizational Influences on Gender Differences in Stress and Strain Aboard U.S. Navy Ships

**PROPOSED LEAD AUTHORS:** Ross R. Vickers, Jr., Ph.D., and James A. Martin, Ph.D. BCD

#### **ABSTRACT**

Shipboard living and working conditions generate significant stress for U.S. Navy personnel [1]. Understanding the sources of stress is necessary to reduce stress. Earlier work in the Women Aboard Navy Ships study indicates that stress and strain differences between male and female crew members were slight on the average [1,2]. However, ship type and occupation are known to influence organizational climate and habitability variables similar to the stresses investigated in the Women Aboard Navy Ships study [3,4]. The objective of this study is to examine occupational factors as correlates of stress and strain and to determine whether those relationships differ for women and men in similar circumstances.

#### **HYPOTHESES**

Based on the preceding considerations, the present study will test three general hypotheses:

- (A) Stress will be higher for women in nontraditional jobs.
- (B) Women will differ most from men on ships with high stress.
- (C) Gender differences in stress will be largest in deployed personnel.

#### **ANALYSIS PLANS**

Aggregate data can be misleading. People with significant stresses and strains may be buried in the larger mass of people who experience relatively minor reactions to shipboard life. Thus, although men and women differed little in overall stress and strain, the slight tendencies toward differences may be the result of people located in particularly stressful situations. Identifying any specific situations which give rise to exceptional stresses may provide insights that can be used to reduce stress. The present study will examine three factors which may identify conditions of exceptional stress for women:

(A) <u>Nontraditional Jobs</u>. Women have had increasing opportunities to fill all types of jobs in the military in recent years. However, the proportion of women in an occupation varies across occupational specialties. When the proportion of women is low, females may face a different social environment and new tasks without a pre-existing support or mentoring network to help them adjust to the situation.

- (B) <u>Ship Type</u>. Living conditions are an important source of shipboard stress [3]. Prior evidence indicates that these conditions vary as a function of ship type [3]. If women are more susceptible to some stress than men, pronounced experiential differences may occur only when stress-eliciting conditions are severe.
- (C) <u>Deployment</u>. Some stresses may occur only during deployment or may be exacerbated by deployment. For example, if one ordinarily does not live aboard ship, shipboard living conditions become relevant only during deployment. Similarly, family stresses may be increased (e.g., by making it more difficult to communicate) or decreased by deployment (e.g., by separating the individual from a contentious social relationship). Deployment may increase stress levels because the ship becomes a total institution encompassing all aspects of a person's life [5]. The effect may be that deployment acts as a multiplier because different types of stress reinforce one another (e.g., by increasing carryover from work to leisure settings).

Stress and distress will be measured by self-report items in the Women Aboard Navy Ships questionnaire. Previous reports describe the stress items and their response distributions [1] and the measurement structure of stress and distress [2].

Ship characteristics will be evaluated two ways. General ship type information will be determined from standard Navy records. These records will be used to characterize ships in terms of Navy functional type, crew size, and other activities. Comparison of recommended manning and actual crew size will provide a general measure of manning level. Manning level will be considered as a potential influence on stress (e.g., more job stress because of fewer people available to do the job, but less living stress because of less crowding).

The proportion of women aboard ship and in various organizational units within ships will provide a second set of ship characteristics. This proportion can be estimated at the total ship level using previously reported data [6]. More detailed analyses will be provided by evaluating ships at the department/division level using ships' rosters constructed originally for the purpose of matching women and men in the research sample. The primary concern will be the gender proportions at the different organizational levels. Low proportions of females in a division will define nontraditional work for women. The assumption is that the low rate reflects the fact that women either have been excluded from the types of work done in the division or have chosen not to follow those career paths. Either reason for underrepresentation would imply that the work is "nontraditional" in the sense that it has not been a common career path for women in the past. The operationalization of "nontraditional" in this case also focuses attention on factors which may significantly modify the social environment in ways that may lead to increased stress (e.g., potential for sexual harassment, in its broadest sense, may be higher in settings where very few women are present).

Shipboard occupation will be defined by a combination of military occupational specialty (NEC) and paygrade. The two measures will be combined because senior personnel may face similar demands for planning, problem solving, leadership, and management skills no matter what

their technical area. Differences between occupational specialties may be most pronounced at lower level positions which involve hands-on work with the specific tools and technologies that differentiate specialties. The determination of status in a traditional/nontraditional classification will be determined by the proportion of women in each MOS/pay grade combination.

Deployment status will be determined from the Women Aboard Navy Ships questionnaire. The questions available to define deployment included asking whether the ship was deployed at the time of data collection and, if so, how long the deployment had been and how much longer it was expected to continue. Additional questions make it possible to determine number of prior deployments to assess the extent of shipboard living experience.

Analysis procedures will include examinations of simple bivariate relationships to describe first order relationships (e.g., stress as a function of ship size). Analysis results will be evaluated in terms of effect size using Cohen's [7] criteria rather than relying on statistical significance testing. Effect size criteria are appropriate because the large sample size means that even weak relationships with no practical significance can be statistically significant. More complex patterns of potential influences on stress and distress will be explored by analysis of variance methods where variables are categorical in nature (e.g., NEC by pay grade by gender) or analysis of covariance where interval level measures are mixed with categorical measures (e.g., stress as a predictor of distress in different NEC by gender groups). Loglinear modeling will be used when all variables are categorical (e.g., department or division by gender analyses to define traditional/nontraditional jobs).

#### LITERATURE REVIEW

The prior analyses indicated that gender and other demographic variables were weak predictors of stress and distress. Indeed, the most striking aspect of the analyses was the close comparability of men and women with respect to both the descriptive [1] and structural components of stress and distress [2]. These initial findings raise questions about where stress does come from if not from the factors previously investigated.

The expectation based on prior shipboard habitability research is that ship type and occupational variables will explain a substantial amount of the variance. Whether these factors interact with gender has not been investigated, but the general lack of gender differences in the previous work is reason to think that interactions will be absent. Thus, the overall expectation is that stress and distress are influenced by ship type, occupation, and deployment status, but the effect will be comparable for women and men.

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# B.3 <u>REPORT TOPIC AREA</u>: Stress and Well-being of Women Serving Aboard Navy Ships

**PROPOSED LEAD AUTHORS:** James A. Martin, Ph.D., Gregory A. Acevedo, M.S., and Frank C. Garland, Ph.D.

#### **ABSTRACT**

This collaborative effort is focused on analyses of military related psychosocial stress factors and their relationship to physical and psychological health, personal and family well being, and duty performance of personnel in the Women Aboard Navy Ships study. This effort includes the validation of a brief survey measure of psychological distress for use in large scale Navy surveys where space and subject burden are of concern. This effort makes use of the complete data and builds on an earlier analysis of psychosocial data from the first phase of data collection [1]. Within rank, gender comparisons will be used to examine the impact of duty (and other military related) stressors on various aspects of psychosocial health, well being, and perceived military performance. Initial analysis demonstrated some across rank gender differences, but only a few, minor within rank and gender differences, for a variety of biopsychosocial outcomes measures. This effort expands the earlier analysis to include a variety of perceived and objective health outcomes [2].

#### **HYPOTHESES**

Perceived duty and military life stress will predict biopsychosocial outcomes for both men and women. Operational based stressors will be more important for men, relationships based stressors will be more important for women.

Women will have higher (worse) biopsychosocial outcome scores as a function of perceived stress.

Outcome scores will be negatively associated with rank (the lower the rank the worse the outcome) for both men and women. The greatest differences between men and women will occur in the most junior rank groups. Overall gender differences will diminish as rank increases.

"On board" ship status will magnify military duty stress and subsequent negative biopsychosocial outcomes for both men and women. The extent of prior shipboard experience will positively effect (reduce) differences between men and women.

A modified version (7 items) of The Center for Epidemiologic Studies Depression Scale will be comparable to the full (53 item) Behavioral Symptoms Inventory (BSI) as a predictor of psychological distress.

Quality of life (QOL) measures will be influenced by duty and military life stressors. Men's QOL scores will be most influenced by duty stressors, women by military life stressors.

#### **ANALYSIS PLANS**

This analysis will examine potential moderating factors, like extent of previous shipboard experience, and the perceived nature and availability of various formal and informal social stressors. Measures will be developed to examine the effects of duty and military life stressors. These variables will be related to overall perceived quality of life for men and women both within and across rank groups.

These data provide a unique opportunity to test the reliability, validity, and utility of a brief, self-administered distress scale. Such a measure (and norms for a military population) will be valuable for future survey studies where space and subject burden issues are of concern [2].

#### LITERATURE REVIEW

This review is designed to supplement the review provided as part of the original study proposal. In the wake of the unfortunate self-inflicted death of the Chief of Naval Operations, Admiral Jeremy Boorda, all branches of the services are increasingly concerned about the psychological health and well being of their personnel [3]. Mental health, stress, and coping are main themes in the 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel [2]. These data also provide an important comparison for the Women Aboard Ships data, including a similar distress measure. Additionally, these data reinforce the importance of work place (duty) stress as a major factor in predicting physical and psychological health, as well as work productivity (duty performance). This report highlights many of the stress issues unique to women and women in military service. Advances in our understanding of gender differences in mental health status [4] highlight the need to continue to address psychosocial stress as a major factor in biopsychosocial adaption. A recent study of pre-service histories of victimization among a sample of military personnel [5] reinforces the fact that military women may be at increased risk for mental health problems (including posttraumatic stress) associated with military duties.

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B.4 <u>REPORT TOPIC AREA</u>: Occupational and Environmental Factors Associated With Upper Respiratory Disease Symptoms Among Active Duty Men and Women Aboard U.S. Navy Ships

PROPOSED LEAD AUTHORS: Edward D. Gorham, M.P.H., Cedric F. Garland,

Dr.P.H., Abram S. Benenson, M.D., Frank C. Garland, Ph.D., Gregory C. Gray, CDR, MC, USN, Deborah L. Wingard, Ph.D., Craig A. Molgaard, Ph.D., and David Macky, Ph.D.

#### **ABSTRACT**

Second year analysis plans in this study will build upon year one analyses of occupational and environmental exposures and upper respiratory infection (URI) symptoms with the addition of sick call visit discharge diagnoses. These diagnoses will include ICD-9 codes 461-466, and 480, which corresponds to URIs due to a variety of viral agents, including parainfluenza viruses, adenoviruses, rhinoviruses, respiratory syncytial virus, and some coronaviruses, coxsackieviruses, and echoviruses [1,2].

#### **HYPOTHESES**

- 1. Incidence rates of self-reported upper respiratory infections (URI) and sick call visit rates for URI are positively associated with occupancy and occupant density in berthing compartments aboard ship.
- 2. Incidence rates of self-reported upper respiratory infections (URI) and sick call visit rates for URI are positively related to ambient carbon dioxide concentrations or other indirect markers of indoor air quality measured in berthing compartments aboard ship.

#### **ANALYSIS PLANS**

During year two, self-reported URI symptoms will be analysed in greater clinical detail. URIs are often divided clincially according to whether fever is present [1-6]. For this reason, the prevealence rate of symptoms associated with self-reported cold symptoms, including fever, cough, sore throat, and sinus congestion, will be reported.

During year one, a positive linear relationship between URI prevalence rates and berthing compartment occupancy (tertiles) was observed in both men and women serving aboard 22 U.S. Navy ships. This relationship will be further explored using an expanded data set and multiple logistic regression [7,8] to adjust for possible confounding variables which may be associated with berthing occupancy and URI prevalence [5,9,10].

Observational studies of the natural history of respiratory tract infections indicate that proximity and ventilation characteristics in sleeping areas may each play an etiologic role in URI acquisition and spread [11-15]. The opportunities for direct contact among susceptibles can be expected to increase in proportion to increases in berthing space occupancy; however, the findings in the year one study did not allow discrimination between spread via droplet nuclie or direct contact, although they supported an association between sleeping area occupancy and increased URI risk.

To address this issue in year two, additional analyses will include direct characterization of ventilation properties of berthing compartments by measurement of carbon dioxide levels aboard a deployed aircraft carrier. This study will assess air quality in berthing compartments by measurement of carbon dioxide levels. The study will also ascertain URI infections diagnosed at sick call for the duration of the voyage. Berthing space occupancy will be ascertained based on the berthing assignments of ship personnel.

Self-reported occupational exposures to dust, petroleum solvents, vapors, and active and passive cigarette smoke exposures and their potential associations [5,9,10] with self-reported URI symptoms will also be examined in greater detail in year two using multiple logistic regression [7,8] to control for possible confounding variables.

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**B.5** REPORT TOPIC AREA: Gender Differences in Predicting Cigarette Smoking Among Navy Shipboard Women and Men.

PROPOSED LEAD AUTHOR: Terry L. Conway, Ph.D. and Frank C. Garland, Ph.D.

#### **ABSTRACT**

The Department of the Navy emphasizes the need for healthful life styles and reduction of health risk factors as part of on going health promotion efforts. One area of considerable concern is tobacco use because military personnel are more likely than their civilian counterparts to smoke. Research has shown that men and women have different experiences in smoking initiation, maintenance, and cessation; thus, specialized interventions to help women and men may be warranted. The primary objectives of this paper will focus on determining correlates of current tobacco use and intentions to smoke a year from now. Understanding the factors associated with tobacco use, including differences between women and men, should help provide information useful for designing more effective interventions to reduce tobacco use among Navy shipboard personnel.

#### **HYPOTHESES**

The primary objective of this paper will focus on determining correlates of: (a) current tobacco use, and (b) intentions to smoke a year from now. Understanding the factors associated with tobacco use, including differences between women and men in the importance of these factors, should help provide information useful for designing effective interventions.

Specific purposes of this paper are as follows:

- 1. Identify and compare the patterns of correlates for three primary smoking measures: (a) current smoker status, (b) quantity of smoking, and (c) intention to be a nonsmoker one year from now. It is hypothesized that many of the same types of variables (e.g., demographics, other health behaviors, psychological factors) associated with tobacco use in civilian samples will also be correlated in this Navy shipboard sample.
- 2. Assess gender differences in the patterns of correlates predicting the three smoking measures. It is hypothesized that different sets of variables will be predictive of tobacco use for women and men.

#### **ANALYSIS PLANS**

Three primary dependent variables will be examined: (a) current smoker status, (b) quantity of smoking, and (c) intention to be a nonsmoker one year from now. A current smoker will be defined as anyone who has smoked at least 100 cigarettes in their entire life, and has smoked at least one day during the last 30 days. Quantity smoked will be based on the number

of days during which one smoked during the past 30 days and the average number of cigarettes smoked per day during the past 30 days. Intention to smoke in the future is measured by an item that asks whether one sees oneself as smoking one year from now, with possible responses on a five point scale from 1=definitely a nonsmoker to 5=definitely a smoker. Independent variables that will be examined as possible predictors of the three dependent measures will include demographic variables (e.g., gender, age, race/ethnicity, highest level of education completed, marital status, pay grade, total number of years on active duty, and where the person lived when the ship was in port), other health behaviors (e.g., alcohol use, physical activity, sleep, and weight gain/loss, use of medical care services), and selected psychological variables (e.g., stress, mood, perceived quality of life, perceived social support).

Primary data analyses will be performed using the SPSS for Windows statistical package. Basic descriptive information will be assessed by determining frequency counts and percentages or means and standard deviations, depending on the type of variable being examined. Simple two group comparisons (e.g., comparing women and men) will be analyzed with chi-square tests (e.g., for categorical or dichotomous variables) or independent t-tests (e.g., for ratio, interval, and some ordinal variables). Pearson correlations and nonparametric tests of association will be used to examine bivariate covariation among variables; multiple regression or multiple logistic regression will be used to examine the independent contribution of the predictor variables hypothesized to account for variability in the three dependent tobacco use measures.

#### LITERATURE REVIEW

Since the early 1980s, health promotion has been an important priority area for the U.S. military [1]. Health promotion programs have been included as part of broader efforts to enhance military readiness and improve quality of life among military personnel. Specific instructions within the Department of the Navy also have emphasized the need for healthful life styles and reduction of health risk factors [2-5]. One area that has been the focus of considerable concern within the Navy is tobacco use [5,6].

Substantial progress has been made towards reducing tobacco use among military personnel. Cigarette smoking has steadily declined over the decade of the 1980s [7,8]. However, military personnel still are more likely than their civilian counterparts to smoke [9], which places them at higher risk for health problems [10] and decreased physical readiness [11]. The higher tobacco use rate among military members compared to civilian counterparts is evident not only among men, but among women as well. Furthermore, personnel assigned shipboard duty may be at even greater risk for smoking, as prior research [12] has indicated that health risk behaviors, such as tobacco use, may be more prevalent among Navy personnel assigned to ships than among personnel with shore based assignments. The shipboard population may, therefore, need health risk intervention efforts that are tailored to the shipboard environment.

Specialized intervention to help women aboard ships may also be warranted. Research indicates that men and women have different experiences in smoking initiation as adolescents or

young adults, in smoking "topography" (i.e., amount of smoke, puffs per cigarette, depth of inhalation, etc.), and in smoking cessation [13]. Studies of smoking cessation point to gender differences in severity of withdrawal symptoms, self-efficacy for quitting, perceived benefits of quitting, coping strategies, and emotional reactions to smoking relapse [13-15]. Women have also been found to express less interest in quitting, fewer perceived health benefits of quitting, more concern about weight gain, and more job pressures related to quitting than men [16].

Taken as a whole, the research on gender differences related to tobacco use suggests that gender specific interventions are called for to be effective in reducing tobacco use and maintaining quit status. Understanding the correlates of tobacco use and intentions to quit or to remain a smoker is a step in the direction of being able to develop more effective gender specific interventions.

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B.6 <u>REPORT TOPIC AREA</u>: Gender Differences in the Association of Life Style Factors to the Prevalence and Symptoms of Migraines and Other Headaches among Navy Personnel

**PROPOSED LEAD AUTHORS:** Deborah Wingard, Ph.D., Donna Kritz-Silverstein, Ph.D., and Frank C. Garland, Ph.D.

#### **ABSTRACT**

Numerous studies have reported that women use medical care, report more symptomatology and have a higher morbidity than men. However, most of these studies are in older men and women. Studies of injuries also tend to show a female excess even given exposure to risk. There are relatively few large, population based comparisons of the experience of symptoms and health conditions among relatively young men and women. The purpose of the present study is to examine and compare the prevalence of migraine and nonmigraine headaches and specific injuries among the relatively young men and women in the U.S. Navy. Analyses will be adjusted for possible confounders, such as age, cigarette smoking, exercise, alcohol consumption and hours of sleep. In women, the influence of exogenous estrogen use (e.g. oral contraceptives) on headaches will also be examined. Analyses of injuries will also include adjustment for the use of protective gear and clothing, and will be stratified by occupational classifications.

#### **HYPOTHESES**

- 1. Women are expected to have a higher prevalence of headaches than men. This association is expected within racial/ethnic groups and within paygrades and ratings.
- 2. For both men and women, it is expected that older age, cigarette smoking, alcohol consumption, lower exercise, and fewer hours of sleep will be associated with increased prevalence of migraine and nonmigraine headaches.
- 3. Within occupational classifications, after adjustment for confounders, such as obesity, alcohol consumption, exercise and use of protective gear, the prevalence of specific injuries (e.g., muscle sprain or strain, back problems) are expected to be greater among women than men.

#### **ANALYSIS PLANS:**

During year two, gender differences will be examined in (a) the experience of migraines and other headaches, and, if time permits, (b) injury rates within specific job classifications.

#### **Variables**

#### **Independent Variables and Co-Variates:**

Gender, age, race/ethnicity, paygrade and rating.

#### Dependent Variables (in separate analyses):

The experience in the past 30 days of any headache (migraine, nonmigraine) and injuries (muscle sprain or strain, back problems, other) severe enough to interfere with daily activities. The Navy questionnaire includes the major components of the International Headache Society diagnostic criteria for migraines (visual disturbances, numbness or tingling, sensitivity to noise and sensitivity to light), as well as prior physician diagnosis of migraine.

#### Statistical Analyses:

The age-adjusted prevalence of migraine and nonmigraine headaches will be examined separately for men and women using the Mantel-Haenszel extension test and/or logistic regression. Analyses will be adjusted for possible confounders, such as cigarette smoking, alcohol consumption, lower exercise, and fewer hours of sleep. We will examine the influence of exogenous estrogen use on headache occurrence. Separate comparisons will be adjusted and/or stratified by race/ethnicity, paygrade and rating.

The age adjusted prevalence of injuries in the past 30 days (including muscle sprain or strain, back problems, and other injuries) will be examined separately for men and women using the Mantel-Haenszel extension test and/or logistic regression. Analyses will be adjusted for possible confounders, such as race/ethnicity, obesity (weight in kilograms/height in meters [2]), alcohol consumption, lower exercise, fewer hours of sleep, recent lifting of 25-49 or 50 or more pounds, and use of protective gloves or boots. Separate comparisons will also be adjusted and/or stratified by paygrade and rating. These occupational classifications reflect different exposures to work related injury.

#### LITERATURE REVIEW

There are numerous reports indicating that women use medical care and seek help from health care providers more often than men [1-4]. Women have also been found to report more symptomatology and higher morbidity than men [3,8]. However, there are relatively few large, population based comparisons of the experience of symptoms and health conditions of relatively young men and women. There are also very few studies with sample sizes large enough to describe gender differences within different racial/ethnic groups. Data from the National Health Interview Survey suggests there may be substantial variations [9].

Several studies have noted that women report more migraine headaches than men (15-18% compared to approximately 6%), and that migraines occur most frequently between the ages of 25 and 55 years [10,11]. One population based study in Finland reported that among women, 54% of all headaches were migraines, compared to 39% among men [12]. In the United States, women from lower income households were at higher risk of having migraines, and were more likely to use health care services for their headaches even after adjusting for headache severity [4,13].

One possible exception to the female excess of morbidity is that more men than women have reported injuries in several national samples [14,15]. However, among intercollegiate athletes, the only gender difference in injuries was a female excess among gymnasts [16], and two studies of military trainees have reported a female excess of injuries [17,18]. Thus, it appears that given equal exposure to risk (either sports or occupational), women may experience more injuries than men. This may reflect women's greater risk of injury, given equal exposure activity. Physiologically, women have less muscle strength, lower bone mass, less lean muscle mass, more body fat, and gynoidal fat distribution [19]. Some of these characteristics may make women more prone to injury, given a similar impact or fall.

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### B.7 <u>REPORT TOPIC AREA</u>: The Association of Behavior and Life Style Factors with Menstrual Symptoms

PROPOSED LEAD AUTHORS: Donna Kritz-Silverstein, Ph.D., Deborah L. Wingard, Ph.D., and Frank C. Garland, Ph.D.

#### **ABSTRACT**

This present study is designed to overcome the lack of scope in previous studies. It will examine the association of obesity, cigarette smoking, alcohol consumption and exercise with the prevalence of menstrual cycle disorders among a large population based sample of women in the Navy.

#### **HYPOTHESES**

It is expected that:

- (a) women who are obese as estimated by body mass index (BMI=weight in kilograms/height in meters) will have a greater prevalence of symptoms and a higher prevalence of time lost from work due to symptoms;
- (b) women who currently smoke cigarettes will have a greater prevalence of symptoms and time lost from work, whereas women who have never smoked cigarettes will have the lowest prevalence of these variables, and women who are past smokers will be intermediate in their prevalence rates;
- (c) there will be no significant differences in the prevalence of menstrual symptoms and the prevalence of time lost from work due to these symptoms by alcohol consumption;
- (d) women who engage in moderate exercise will have the lowest prevalence of symptoms the lowest rates of time lost from work due to these symptoms while women who engage in the least amount of exercise are expected to have the greatest prevalence of cramps or pain during the menstrual cycle, abdominal pain, other menstrual disorders and time lost from work due to symptoms and women who have the greatest amount of heavy exercise are expected to report the greatest prevalence of irregular menstrual cycles, missed periods and periods with scanty menstrual flow.

#### **ANALYSIS PLANS**

#### Independent Variables and Covariates:

Age, race, paygrade and rating.

#### Dependent Variables (in separate analyses):

Cramps or pain during the menstrual period requiring medication or time off work; bleeding between periods; excessive frequency of periods (time between periods too short); heavy periods (excessive menstrual flow); period lasting longer than one week; scanty menstrual flow; irregular periods; other symptoms related to menstrual periods; missing two or more hours from work during the previous 90 days due to symptoms or disorders of the reproductive system; and missing one or more days of work during the previous 90 days due to symptoms or disorders of the reproductive system.

#### Statistical Analysis:

Age adjusted comparisons of the prevalence rate of each symptom and of time lost from work due to symptoms by quartile of BMI, by cigarette smoking status; by amount and frequency of alcohol consumption; and by exercise will be performed with the Mantel-Haenzel extension test. The age adjusted associations of obesity, cigarette smoking, alcohol consumption and exercise, both alone and in combination with each other, with the prevalence of each symptom and of time lost from work due to symptoms will be examined using logistic regression. To test the possibility of a U-shaped relation between exercise and symptom prevalence, a quadratic component for exercise will be added to the logistic regressions. Analyses will also be performed after adjustment for, and stratification by, race and paygrade/rating.

#### LITERATURE REVIEW

It has been estimated that 50-85% of the 15 million menstruating women in the United States suffer to one degree or another from dysmenorrhea and other menstrual and premenstrual symptoms [1-3]. For some women, the symptoms associated with the menstrual cycle are severe enough to cause a disruption in their daily activity [2,3]. These symptoms are responsible for more lost work and school hours among women than any other disease entity [1-4]. Approximately 5-10% of all women (almost 3.5-7 million American women) are incapacitated for one to two days each month because of their symptoms [1,5].

Previous studies examining the association between behavioral and life style factors, such as obesity, cigarette smoking, alcohol consumption and exercise, have yielded inconsistent results. For instance, weight loss has been associated with irregular periods and amenorrhea [6,7]. However, obesity has also been associated with amenorrhea and other alterations in the menstrual cycle, such as hypermenorrhea, oligomenorrhea, anovulation, infertility, and premature menopause [8]. Tolino, et al. [8] also reported that obese women have reduced serum levels of FSH, increased LH, increased LF/FSH ratios, decreased levels of sex hormone binding globulin with a resultant increase in free testosterone, and hyperestrogenism due to the increased conversion of androstenedione to estrogen in fatty tissues, all of which could affect the menstrual cycle and its characteristics.

Cigarette smoking has been associated with shorter cycle length, increased dysmenorrhea, and menopause that occurs on average one to two years earlier than for nonsmokers [2,9]. Higher alcohol consumption has been associated with increased premenstrual symptoms [10]; however others have reported no associations between either cigarette smoking or alcohol consumption and dysmenorrhea [9,11,12].

Exercise has been frequently recommended for treatment of dysmenorrhea [13] and several studies have reported a beneficial effect for exercise interventions on the premenstrual syndrome and dysmenorrhea [14-16]. Prior, et al. [14] found that the severity of premenstrual symptoms among sedentary women was decreased after they had participated in a six month physical training program. Israel, et al. [16] found that 12 weeks of an aerobic exercise program reduced symptoms of dysmenorrhea. Johnson, et al. [17] reported that more frequent exercise is related to lower severity ratings of some menstrual symptom clusters, but the intensity of exercise is unrelated to symptoms. However, Jarett, et al. [12] reported that there were no significant differences between women with and without dysmenorrhea in exercise behavior and other studies have associated excessive exercise with delayed menarche, lack of ovulation and the absence of menstrual periods [6,13,18,19].

Because obesity, cigarette smoking, alcohol consumption and exercise are all potentially modifiable characteristics, the demonstration and elucidation of the associations of behavioral and these life style factors with menstrual symptoms represents an important avenue of research. However, most of the previous studies of the association of life style variables with menstrual disorders have relied on small clinic or physician based samples of women, or small samples of college students. There have been relatively few large, population based studies of the association of behavioral and life style variables with dysmenorrhea or other menstrual symptoms.

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#### B.8 REPORT TOPIC AREA: Predicting the Health of Navy Service Women and Men

**PROPOSED LEAD AUTHORS:** Dorothy J. Jeffreys, Ph.D., Theresa Russo, Ph.D., and Frank C. Garland, Ph.D.

#### **ABSTRACT**

This study will investigate the appropriateness of different models for predicting the physical and/or emotional health of Navy service members assigned to ships by family composition, developmental stage of children and gender. Other factors hypothesized to affect the service members' health are stress, distress, and formal and informal supports. Covariates also believed to affect the service members' health are demographic (e.g., age, race and education), and military information (e.g., paygrade, length of service, and deployment).

#### **HYPOTHESES**

Health issues for service members will differ by formal and informal supports, stress, family composition (single, single with children, married, married with children), development stage of their children (infant, preschool, school age, adolescent), and gender, as well as other demographic factors and military experiences.

Quality of life (global life, job, personal, family, spouse, and children) of service members will be affected by the health, supports, stress, development stage of children and family composition. Other factors affecting the service members quality of life will be demographic and military information.

Comparisons of service women's and men's quality of life and current mental and physical health will be made by supports, stress, family composition, developmental stage of their children, demographic variables and military experiences.

#### **ANALYSIS PLANS**

#### Variables:

The independent variables are family composition (single without children, single with children, married without children, and married with children), developmental stage of children (infant, preschool, school age, and adolescent) and gender (male and female). The dependent variables are physical and mental health status (health conditions during the last 30 days regardless of whether or not they resulted in a visit to sick call or a health care provider, unable to perform military duties for one or more days because of health or emotional problems, and health and physical quality of life); quality of life (job, personal life, life as a whole, family, spouse, and children); and coping ability (during the past two weeks, how well coped with stresses). The covariates consist of four types: demographic (age, education, and race of service member), military

information (length of military service, assignment to ship, status of ship, length of current ship assignment, number of deployments), distress (CES-scale and unable to perform military duties for one or more days because of personal or family problems), and social support resources (relationships with family, friends and peers, associations with organizations, and perceptions of the helpfulness of Navy professionals and personnel).

#### Analyses:

The basic descriptive and predictive analysis completed in year one of the study will be repeated in year two to determine the continuity of the data. Descriptive data using frequencies, percentages, measures of central tendency and variability will be calculated for all the variables listed above: independent, dependent, and co-variables. The predictive information will be obtained using correlations, analysis of variance, multiple regressions and discriminate analysis.

Based on developmental theory and the analysis in year one, it is assumed that there are different paths for explaining health and its affect on the military members quality of life and retention in the Navy by family composition and age of children. Therefore, the analysis will focus on examining these models by using path analysis.

#### Theoretical Framework:

Military induced separation is the major dissatisfaction with military life [1,2]. Stress of separation is compounded when the military assignment involves combat duty, extended separation without communication, or service in extremely difficult circumstances. Symptoms of stress related to separation include: increased use of drugs and alcohol; low frustration level when dealing with children; and social isolation [3-6].

The primary conceptual model for examining military induced separation has been the ABC-X family stress model which studied families separated by war [7]. This model has since been modified to the Double ABC-X model for further study of family adaption to stressors [8]. Allying this conceptual model, the primary goal of much of the military family research has been to identify those stressors which families face and the resources used to cope with them. A consistent theme throughout this literature is that these stressors provide the potential for what is identified as "pile up" of family life stressors [8]. Family and behavioral scientists have hypothesized that excessive stressors, particularly within a short period of time, may deplete a family's resources making coping difficult and creating a high probability of family disruption.

Coping skills have been found to decrease vulnerability, strengthen family protective resources, reduce the impact of a stressor event, and actively influence environment to change circumstances [9]. Furthermore, different coping strategies are used across the life cycle [10]. Family adjustment to stressors depends largely on the family resources [11]. Two sets of internal family resources to help families cope with stress are Integration - the strength of a family's common interest, affection and unity; and Adaptability - a family's ability to be flexible in

discussion and decision making [12]. Families may use external resources when they do not have enough internal resources to cope with problems [10]. Social supports, such as extended family and friends may be sought out when family experiences increase stress, while at times of low stress these resources are not as apparent [10]. Olson, et al. [10] also found that at certain stages of the life cycle, primarily during child rearing, families may be more likely to seek out formal support networks, such as formalized programs. Research on military families found families utilized informal support networks of families and friends more frequently than formal support networks [13].

Debate continues over whether or not military families are worse, better, or show little difference when compared to their civilian counterparts because of these stressors. Since the introduction of the ABC-X model [7], the stressors of military families have been labeled nonnormative; however, as has been reported, many of these stressors have become normative to a peace time military [14]. Events such as relocation, long work hours, and training deployment are part of the military life style; therefore, they have become expected or normative stressors. However, military families are also challenged by and often face unexpected or nonnormative stressors, such as delay in returning from scheduled deployment, change in training schedule, threat of conflict, or unscheduled deployments.

More recently, a developmental model was introduced into the discussion of military families. Ideas have been presented about a developmental perspective for studying military families [15] and can be paralleled by the developmental attachment theory to the feelings military couples experience when they undergo separation [16]. This developmental model is integrated with the ABC-X model of family stress to better understand the functioning of military families. Military families may cope differently with normative and nonnormative stressors based on their developmental level.

Family Development Theory [17] indicates that families are working on developmental tasks specific to their position in the life cycle. Family development tasks refer to changes that occur related to scheduled events and transitions that most families expect to occur at certain points in the life cycle [11]. The terms position, role, and norm are used to define developmental tasks [18]. Position is related to the location of the individual within the family. Role is the script or part the individual plays related to the position within the family (i.e., mothering, financially providing). Norm is the expectation for behavior shared by family members. Development task can then be defined as "a set of norms arising at a particular point in the career of a position in a social system" [19]. The developmental needs of families change over time as individuals and culture grow and change. The age of the oldest child is used to identify the stage of the family life cycle and define the tasks. For example, during the preschool stage, families are oriented toward the growth and nuturance of children, with parents as the primary source of information and control, while families with adolescents are dealing with the demands of preparing to launch their teenagers from home [10]. The first child typically introduces the demands for family changes based on his/her developmental level [19]; however, families with subsequent children will have the added complexity of multiple developmental tasks.

The work and family role demands of adulthood are a stage of the life cycle. Work-family conflicts increase as one's obligations to family increase through marriage and the arrival of children [20]. The roles of work and family are both demanding and, therefore, conflict may arise from the simultaneous role demands [21]. This conflict may aggravate married life, resulting in lower levels of marital and family satisfaction, as well as creating job stress and physical strain [21]. It is also suggested that interrole conflict may be greater for working wives than working husbands [22]. This difference may be linked to the shift in family life cycle patterns created as the role of women in the family and society changes. McGoldrick and Carter [11] suggest that women's individual life cycle tasks were linked almost exclusively to their child rearing stages; whereas for men, their age identified their individual life cycle tasks. Having had primary responsibility for home, family and child care, women struggle to establish goals beyond those of family. The goals of career and family have been parallel for men, whereas women may have difficulty maintaining their role in the family while establishing a role outside the family. As a result, women have been the most prone to difficulty during life cycle transitions [11].

It is likely that most stressors experienced by nonmilitary families will also be common for military families; however, there may be specific stressors for military families throughout the life cycle. For example, it is suggested that newly married couples who are not yet attached to each other will have more difficulty coping with separation [16]. Research also suggests that families tend to adapt better after experiencing separation [6]. Additionally, quality of military life as perceived by the spouse and family has been found to be related to the service members' job performance and retention [23,24]. This has significant implications in that families who do not adapt well to military life style may have poor health, perform poorly in their job, have poor family relationships, and/or separate from the military.

There are two extremely relevant issues related to the deployment of women. The first includes the phenomenon that the military is deploying increased numbers of service women for training, humanitarian, and combat reasons. The second deals with the problem that very little research has addressed separation issues faced by service women and their families. Consequently, questions remain unanswered as to the interaction between family relations and the physical health, mental health, and military experience of service women. The following figure illustrates factors that are felt to be relevant for predicting the health and well being of military members as a result of the following literature review and the analysis completed on data collected in year one of the study.

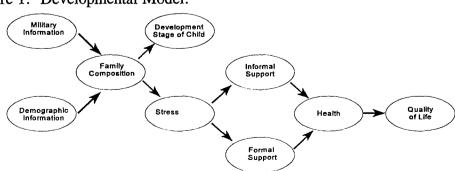


Figure 1. Developmental Model.

#### LITERATURE REVIEW

#### **Deployment Issues for Family:**

The family environment issue is important to include when discussing effects of separation. Evidence clearly supports the hypothesis that separation may affect the health of all family members [3,4,25]. Overall, research has shown that military families may be more susceptible to spousal and child abuse, substance abuse and illnesses because of the stress induced by separation [4,3,25-27]. The majority of this research, however, has focused primarily on the female spouse, rather than the military member, male or female. Little is known or discussed about how the military member deals with separation and the influence this may have on their health. The GAO report also identified sources of stress for both deployed men and women as uncertainty of war; SCUD missile alerts; being away from families and friends; austerity of physical environment; lack of mail; rumor; military family policy; and uncertainty about when personnel would return home [28]. The report further cited that differences in ability to cope with stress of deployment seem to be more related to individual abilities rather than to gender. It is also suggested that women may face more stress related illnesses than men due to feeling pressure to prove themselves, role conflict to perform like a man, and the need to conform to the standards of femininity held by men [29,30]. These stress related illnesses seem more common for women assigned to traditional jobs than to nontraditional jobs [31].

Similar to research on physical health and family issues related to military separations, the primary focus of mental health aspects has been on the spouse (primarily wife) and children of the deployed service member. Studies found family problems among children and spouses of service members to include phobias, somatic complaints, increased depression, anxiety, grief, anger, guilt, sleep disturbance, and loneliness [3,4,26,32]. The level of stress caused by separation varies depending on the nature of the deployment (i.e., length of separation; combat or training deployment). Despite the lack of research dealing with service member stress, all indications are that they do experience a great deal of stress. Their stress is twofold. The first relates to feelings about separation and job, while the second deals with the concern over the well being of the family [28].

#### Marital Relations:

The stress of separation has a major impact on the marital relationship. Again, the majority of research has focused on wives of service men rather than on the service member or even husbands of service women. The absence of the military service member creates ambiguity of boundaries and roles, and may create a great deal of conflict. Common problems for military spouses are loneliness, problems with children and physical illness [33]. Newly married couples are particularly vulnerable to disruption caused by separation because they have had less time to solidify their relationship. Correlational to the life cycle, couples experiencing their first separation are likely to experience more negative effects than couples who have undergone

multiple separations. Separation may, however, have beneficial effects, such as allowing for individual growth and for enhancement of the marital relationship [33].

Research on occupational commitment and marital adjustment found that perceptions of both men and women were that higher levels of occupational commitment by wives adversely affected marital adjustment [34]. This finding was consistent with another study which found that greater work involvement of the wife (measured by hours worked per week) negatively affected the marital relationship [35]. It is possible that these problems may be even greater for service women who experience extended separation from their families due to deployment.

Research on maternal employment suggests that if a mother is satisfied in her employment then this spills over into her family life. One study found that mothers who were satisfied with their jobs were more autonomous and less anxious on reunion with their infants after separation [36]. A study assessing depression in working women, found that depression was more common in women who were working outside of the home and who held a more traditional view of what their role should be within the family [37]. The fact that mission readiness weighs heavily on the ability of personnel to focus on their duty must be recognized [38]. It is crucial that military personnel feel confident that their well being, as well as the well being of their families, is an important concern and priority of their commanders.

#### Role Strain and Social Supports:

Research on role strain regarding women is related primarily to the multiple roles that women fulfill within the family and in their professional lives [39,40]. Additional research indicates that significant role strain exists for women who are single mothers, and for married women with young children. Research conducted by Menniger [40] indicates that flexibility in scheduling in the work place can greatly reduce the role strain that women experience. This finding further supports the need for research regarding the role strain and support which do or do not exist for women in the military.

#### Children and Separation From Their Parents:

The literature regarding military separation and children focuses on father absence and the reaction of the child to the separation. Moreover, what has been reported is inconclusive because a child's emotional and behavioral problems are not assessed prior to the father's absence [41]. Additionally, little has been reported on mother absence. What has been reported is that children manifest both emotional problems and behavioral problems [42-44]. However, these problems are correlated with length of separations and number of separations. Lengthy separations appear to bring about more detrimental effects than shorter ones [43], while first time separations may be the most difficult [44].

Studies have also suggested that children exhibit more behavioral and emotional problems when the mother experiences difficulties handling management of daily activities [45,46]. Some

research suggests that the emotional development of each parent, as well as the stability of their marriage, contributes to a child's emotional development and resiliency [47]. Extrapolations from research on father absence can be made to assess the effects of a mother's absence on her children, but the implications could be more severe in nature. It can be anticipated that if children are negatively affected by separations from parents, the parent will in turn be affected.

With regard to maternal employment, research suggests that children whose mothers are employed full time are at risk for developing insecure attachments to their mothers, are more disobedient toward adults, and more aggressive toward peers [48,49]. Research has found that mothers who prefer to be employed may become less anxious about separation from their infants because the two roles of mother and employee are integrated, as well as denial of anxiety about leaving the infant to pursue a career [50,51].

#### **Child Care:**

There are a number of problems associated with child care in the military [38]. More than one-half of the U.S. military installations do not have organized child care centers, while those which do provide on-site child care only meet about 60% of the demand. Additionally, extended waiting lists, hours which do not correspond with duty hours, and high costs signal this as an area of concern. Child care issues become compounded in times of deployment. When a service women deploys, if married, she must be able to rely on her spouse to provide primary care. If she is a single parent or married to another service member who is susceptible to deployment, she must ensure that sound child care arrangements are in place. Child care was found to be significantly related to multiple role strain for working women [39]. There is limited research to substantiate the effectiveness of child care arrangements and to the extent this issue impacts service women's retention decisions.

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B.9 <u>REPORT TOPIC AREA</u>: Normative Comparisons of Psychological Symptomatology in Navy and Army Women and Men: Effects of Gender, Demographic Characteristics, and Deployment History

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#### **ABSTRACT**

Report 2 augments the normative data base for the psychological symptoms and subscales on the self-reported symptom inventory presented in Report 1. Secondary analyses include a factor analysis of the inventory to examine the internal structure of the instrument for the population of Navy respondents, and a detailed comparison of symptom reports organized by specific demographic categories. Comparisons with the expanded Army data base of male and female soldiers, and risk status based on global indices of psychological distress from the symptom inventory will be examined. The additional Navy survey respondents expand the sample of those with a history of military deployments, enabling further assessment of deployment as a risk factor.

#### **HYPOTHESES**

Establishing appropriate symptom norms for service members and comparing the effects of deployment for large sample across a wide variety of operations may contribute to the development of the following objectives:

- Doctrine and training concepts to enhance the service member's psychological ability to withstand the stresses of high risk force projection deployments;
- Preventive doctrine and effective medical and leadership practices to mediate the stresses of deployment for service members and their families;
- Taxonomy and scaling of deployment events and exposures that can lead to problems in post deployment psychological adaption of service members and families;
- Doctrine and training for rapid intervention and prevention of post-traumatic stress symptoms for leaders and medical personnel operating during deployments;
- Rapid assessment and triage techniques for service members and groups exposed to trauma to determine the need for and scale of medical intervention;
- Profile of subpopulations at risk for post deployment stress symptoms or reactions.

#### ANALYSIS PLANS

Analysis plans for Report 2 include the addition of new survey respondents to augment the preliminary normative data base established for Navy service members on the self-reported symptom inventory described in the first report. Additional comparisons will be made with the currently expanded Army data base collected for male and female soldiers over the course of several different deployments: Operations Desert Shield/Desert Storm; Operation Restore Hope, Somalia; Operation Vigilant Warrior, Kuwait; and Operations Restore Democracy, Haiti. The additional Navy data will expand the sample of respondents with a history of military deployment, enabling further assessment of this experience as a risk factor with consequences for post-deployment psychological adaption. Correspondingly, risk status based on global indices of psychological distress from the symptom inventory will be compared across gender and other demographic variables, forming the preliminary samples to be followed during the Time 2 data collection.

#### Normative Data Analyses

Augment the preliminary gender based norms described in Report 1 for Navy Personnel to include:

- Compare results on the nine symptom dimensions and the Global Severity Index as reported in the symptom inventory to determine differences based on gender and other demographic factors.
- Perform a factor analysis using the complete data base of Navy respondents to assess the internal structure of the symptom inventory and to verify the hypothesized dimensions.
- Compare mean differences using t-tests on the nine symptom dimensions and the Global Severity Index for the completed sample of Navy service members collected at Time 1, and between the Navy respondents and samples of Army personnel surveyed during deployment.
- Assess the effects of previous deployments on current psychological status, to include the effects of a past history of multiple deployments.

#### Risk Status Analyses

Identify high and low risk groups based on self-reported symptoms to be compared with Time 2 longitudinal follow up of respondents.

• Determine whether there are gender differences in risk indicators.

- Determine whether risk status relates to a history of previous deployments.
- Relate risk status to health symptoms and performance.

#### LITERATURE REVIEW

Several recent studies include samples of service members with data collected during or after deployment using the same symptom inventory as the current Navy study. A brief review indicates areas of comparison with the Navy data and highlights the importance of collecting prospective data and establishing risk status for follow up.

The Department of Military Psychiatry conducted an extensive research program before, during and after Operation Desert Storm (ODS). Approximately 13,000 deployed soldiers completed surveys rating stresses during and after ODS, individual morale and competence, unit cohesion, and leader effectiveness, and assessed personal resilience, coping strategies, and stress related symptoms. The surveys were supplemented by interviews conducted in Southwest Asia and one year post return at home stations. Analyses indicated that the stress of the deployment was more significant than that of the ground war, and that fewer than three percent of respondents would meet diagnostic criteria for Post Traumatic Stress Disorder (PTSD). Those who responded to the symptom inventory in a manner consistent with PTSD were more likely to report greater combat exposure, lower personal resilience, and lower unit cohesion. Comparisons with subjects who had not deployed indicated that despite the difficult deployment and the trauma of combat, the overall population was basically healthy and well adjusted.

Most soldiers surveyed had adapted well since ODS and the vast majority were not experiencing major psychological distress. However 10-15% of the sample appeared more stressed than their peers, and attributed more of their stress to the deployment. Some soldiers were reporting psychological distress or persistent unexplained physical symptoms - enough to be an issue of concern to them and to care providers. Factors found to related to successful coping included: fewer reported symptoms before the ground war began; less reported combat exposure; post combat or post deployment debriefing; unit cohesion; and personal hardiness. In general, more current life stresses, such as unit issues, leadership, and military downsizing, overshadowed the Desert Storm deployment experiences [6,17].

Additional research conducted during more recent deployments is described in a recent report, Psychological Well-being and Physical Health of Soldiers Deployed for Operation Uphold Democracy: A Summary of Human Dimensions Research in Haiti [7]. The study compared the Global Severity Index score on the symptom inventory across several Army deployments finding differences based on the particular deployment experience, with the pre-combat phase of Operation Desert Shield showing the highest symptom ratings. When the researchers examined soldier characteristics in relating to a particular deployment, they found the primary symptom rating differences related to rank, with soldiers in the ranks of Private to Specialist/Corporal

reporting significantly higher levels of psychological distress than senior enlisted, company grade, or field grade officers. When rank was controlled, there were no differences based on age, gender, or marital status.

In related analyses, the critical differences on global symptom measures were found between those soldiers who had deployed versus those who had not, despite gender [14]. Similarly, a study directed by the OSD/HA comparing active duty and reserve personnel across services, found the critical difference in reported symptoms to be related to the experience of deployment. The 710 deployed service members were primarily from Hawaii with the largest number drawn from the Marine Corps and the Navy. The non-deployed service members numbered 1,544 and came primarily from the Marine Corps, Navy and Air Force [8]. These data will provide comparisons with the current Navy data base since many respondents have the same service experience.

#### **Brief Symptom Inventory (BSI)**

The symptom inventory used in the current Navy study and in the research on deployment discussed above is a 53 item self report scale of symptoms [4] derived from the 90 item Symptom Check List (SCL-90-R) [2]. Respondents are requested to rate the items on a five point scale of distress, ranging from "none" (0) to "extreme (4), using the past week as a time frame for assessment. The BSI has been used extensively in both research and clinical practice to determine symptom profile for psychiatric and medical patients, and nonpatient populations [1,5,9,10,11,12,13,15,16]. Derogatis and Melisaratos [3], in their frequently cited introductory report, include an overview of studies using the BSI, analyses demonstrating high reliability with the SCL-90 ranging from 0.92 to 0.99 indicating that both inventories measure the same constructs, and convergent validity between the symptom dimensions of the BSI and the clinical scales of the MMPI. The report also includes normative data for psychiatric inpatient, outpatient and nonpatient populations.

The BSI includes nine symptom dimensions or subscales: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism, as well as three global indices of psychological distress. Those using the BSI as an outcome measure can assess respondents using either symptom profiles based on subscale scores, or the global indices to determine overall distress level. Internal consistency for all nine symptom dimensions is acceptable with alpha coefficients ranging from a low of 0.71 on the Psychoticism dimension, to a high of 0.85 on Depression. Test-retest reliability over a two week period ranged from a low of 0.68 for Somatization, to a high of 0.91 for Phobic Anxiety. The Global Severity Index (GSI) reveals a stability coefficient of 0.90 giving strong evidence for the consistency of the BSI across time [4].

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B.10 <u>REPORT TOPIC AREA</u>: Availability of Gynecological Supplies and Other Issues Related to the Reporting Requirements of the Department of the Navy's Policy on Pregnancy

**PROPOSED LEAD AUTHORS:** Frank C. Garland, Ph.D., David Timberlake, M.P.H., and Diana R. Simmes, M.P.H.

#### **ABSTRACT**

This year two report will address issues pertinent to the Department of the Navy's Policy on Pregnancy, including the availability of gynecological supplies, counseling, and gynecological appointments.

#### **HYPOTHESES**

This is primarily a descriptive study which will report on: (1) the perceived availability of gynecological supplies, counseling, and appointments; (2) pregnancy testing and results; and (3) motivation underlying pregnancy.

#### ANALYSIS PLANS

This descriptive report is drawn from the data elements in two surveys; the U.S. Navy Shipboard Health Survey and the Anonymous Supplemental Health Care Behavioral Survey. Frequency counts and percentages will be computed for the following variables: availability of gynecological supplies, availability of various types of counseling, requests for OB/GYN appointments, suspicion of pregnancy, pregnancy tests and results, use of birth control, and reasons for becoming pregnant. The perceived availability of gynecological supplies, counseling and appointments will be measured by assessing agreement or disagreement on whether or not these services are readily available. A five point Likert-type scale will be utilized, with 1=strongly agree, 2=agree, 3=neither agree nor disagree, 4=disagree, and 5=strongly disagree.

#### **METHODS**

#### **Population**

All women serving aboard U.S. Navy ships were eligible for inclusion in the survey portion of the study during Year 1. An equal number of men serving aboard ship matched on relevant characteristics were also eligible. The Navy Bureau of Personnel (PERS-OOW) provided a listing of all ships with women assigned aboard; this listing was verified with respective Fleet Surgeons and Force Medical Officers. A total of 74 ships with 7,944 women and 69,012 men assigned were determined to be eligible for inclusion in the study.

The first part of this report, which addresses the availability of counseling, gynecological

supplies, and gynecological appointments in the U.S. Navy Shipboard Health Survey, is based on the first 36 ships surveyed. These ships were surveyed based on availability as determined by the Commanding Officer and Medical Department of each ship. The ships surveyed included USS BARRY, USS CAMDEN, USS CAPE COD, USS COMSTOCK, USS CORONADO, USS CURTIS WILBUR, USS DIXON, USS EMORY S. LAND, USS GRAPPLE, USS GRASP, USS HOLLAND, USS KISKA, USS L.Y. SPEAR, USS MONONGAHELA, USS MOUNT BAKER, USS MOUNT HOOD, USS PLATTE, USS RANIER, USS SANTA BARBARA, USS SHENANDOAH, USS SUPPLY, AND USS YELLOWSTONE. These 36 ships had 5,510 women and 18,443 men assigned aboard.

The second part of this report, which addresses pregnancy testing, is based on the Anonymous Supplemental Health and Behavioral Study. This survey consists of four sections which include demographic data, birth control, STD prevention, and a section designated for women's issues (birth control, pregnancy testing, and motivation). This report is restricted to the population of women who participated in the surveys.

#### Survey Development

Several methods were used for the development of the U.S. Navy Shipboard Health Survey used in this study, including the following: (1) review of extant questionnaires, literature, and standard scales; (2) convening of a panel of subject matter experts; (3) elicitation of major issues from knowledgeable sources; and (4) review of Navy requirements concerning the reporting of women's health and access to health care.

A careful review of the Department of the Navy's Policy on Pregnancy [1] was performed to determine the relevant reporting requirements.

#### Survey Administration

The overall administration plan included the distribution of individually identified packets with all necessary materials to each study subject. Whenever possible, study subjects were brought together in a common location aboard ship, briefed on the study, asked to sign informed consent, and to complete the survey while study coordinators were present. When, due to shipboard activity, it was not practical for all study subjects to remain in one area, surveys were distributed, and the participants allowed to fill them out in work spaces. The completed surveys were collected by study staff in sealed envelopes in all cases.

#### Response Rates

The overall median response rate for women was 67.4%. Participation rates varied by the number of women serving aboard ship. Ships with fewer than 100 women assigned had an overall median response rate of 74.7% compared to ships with more than 100 women assigned, which had an overall median response rate of 49.6%.

#### LITERATURE REVIEW

None.

#### **BIBLIOGRAPHY**

1. Secretary of the Navy, SECNAV Instruction 1000.10, "Department of the Navy (DoN) Policy on Pregnancy," dated 06 February 1995.

#### APPENDIX C

#### Health Data Collection Instruments

#### APPENDIX C

#### Health Data Collection Instruments

C.1	Follow-up Survey Instrument, Form WA
C.2	Follow-up Survey Instrument, Form MA
C.3	Follow-up Survey Instrument, Form WB
C.4	Follow-up Survey Instrument, Form MB
C.5	Follow-up Survey Instrument, Form WC
C.6	Follow-up Survey Instrument, Form MC
C.7	Follow-up Survey Instrument, Form WD
C.8	Follow-up Survey Instrument, Form MD
C.9	TWA Flight 800 Recovery Operations, Form WB G
C.10	TWA Flight 800 Recovery Operations, Form MB G

#### APPENDIX C.1

Follow-up Survey Instrument, Form WA

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form WA, v.1.5, 09 Sep 96

## Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- Thave been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.
- 8. I fully understand the above statements. By my signature below, I give my voluntary informed consent to participate in this research study as it has been explained to me above.

Signature:		Date: -	- 199	
		Month	Day	Year
Permanent address	City	State	Zip Co	ode

#### Information to Participants

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of 4. Voluntary disclosure. I understand that all information Information Act. derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

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- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
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- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Solution Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
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1.	Today's date:	Month:	D	Day: Year: 199	
2.	What is your current  Never married  Married  Separated  Divorced  Widowed	•	eck one t	box)	
3.	What is your pay grad	de? (Circle one)			
	<u>Enlisted</u>	Warrant <u>Officer</u>	Officer	:	
		W-1 O-1 W-2 O-1 W-3 O-1 W-4 O-1	-2 -3	O-5 O-6	
4.	If you are Navy enlist	ed, what is your ra	ting (e.g	., SN, FN BT, HM, ASM)?	
5.	If you are Marine enlisted, what is your M.O.S. number?				
6.	How many people currently are in your work group?  Number of men: Number of women:				
7a.	To what ship or comm	nand are you curre	ntly assig	gned?	
7b.	What is your department	ent? (Check one bo	) (x)		
	Administration  Air  Communicatio  Deck  Engineering	ı	6   7   0   8   0   0   0   0   0   0   0   0	Navigation Operations Reactor Repair Supply Other ( <i>Please specify</i> ):	
8.	How long have you be Years: and m	een assigned to this	ship or	command?	

DEMOGRAPHIC DAVA

9.	-	If you are currently aboard ship, what is your ship's current status? (Check one box)						
	ı 🗇	In home po	ort	3 🗖	In port other than home port			
	2 🗆	At sea		4 🗇	In shipyard			
				9 🗖	Other (Please specify):			
10.	Denla	oyment status						
10.	a.	-		ı deploye	ed during the past 12 months?			
		(For purposes of this questionnaire, deployment is defined as:						
		"Ship scheduled at sea for 30 days or more")						
		Times						
	b.	Are vou cu	rrently deploye	ed ( <b>30 d</b> a	vs or more)?			
	0.	(Check one		a (eo aa	jo or more).			
		•	(Please skip to	question	11)			
		2 ☐ Yes	` 1	1	•			
	c.	What date of	lid vou begin t	his denlo	vment?			
	٠.	What date did you begin this deployment?  Mo.: Day: Year: 199						
11.	Цама	you deployed	l in the Rocnia	area duri	ing the past 12 months? (Check one box)			
11.	1 🗇	No No	i iii tiic bosiiia	arca duri	ing the past 12 months: (Check one box)			
	2 🗇	Yes						
12.					our home port? (Check one box)			
	1 🗆	Aboard ship		3 🗖	BEQ/BOQ			
	2 🗖	Navy housi	ng	9 🗖	Other			
			B I E AVI	NEL/O(O)	NDIFFIONS			
13.		•			ns during the past 30 days whether or not it			
			o sick call or a		•			
			r "no" or "yes	-				
	a. b.	1 □ No 1 □ No	2 ☐ Yes 2 ☐ Yes	Comn Dizzii	non cold symptoms			
		1 🗆 No	2 🗆 Yes	Chills				
	c. d.	1 🗆 No	2 ☐ Yes	Cough				
	e.	1 🗆 No	2 ☐ Yes	Sore t				
•	f.	1 🗆 No	2 ☐ Yes	Fever	an Out			
	g.	1 🗆 No	2 ☐ Yes	Flu				
	h.	1 🗆 No	2 ☐ Yes		nea lasting at least 3 days			
	i.	1 🗆 No	2□ Yes		ch problems			
					*			

13.	Con	<i>itinued</i> Have	you had any	of these health conditions during the past 30 days
	whether or not it resulted in a visit to sick call or a health care provider?			
	(Please check either "no" or "yes" for every condition)			
	j.	1 🗖 No	2 ☐ Yes	Constipation
	k.	1 🗖 No	2 ☐ Yes	Indigestion
	1.	1 🗖 No	2 🗖 Yes	Nausea or vomiting
	m.	1 🗖 No	2 🛘 Yes	Sinus trouble
	n.	1 🗖 No	2 🗖 Yes	Hay fever
	0.	1 🗆 No	2 🗆 Yes	Shortness of breath
	p.	1 🗖 No	2 ☐ Yes	Hoarseness
	q.	1 🗖 No	2 🗖 Yes	Skin problems
	r.	1 🗖 No	2 🗖 Yes	Muscle sprain or strain
	S.	1 🗖 No	2 🗖 Yes	Back problems
	t.	1 □ No	2 ☐ Yes	Hearing problems
	u.	1 □ No	2 ☐ Yes	Irritated eyes
	v.	1 □ No	2 ☐ Yes	Trouble seeing with one or both eyes even if
				wearing glasses or contacts
	w.	1 🗖 No	2 🗖 Yes	Pain in stomach or abdominal area
	х.	1 🗖 No	2 🗆 Yes	Heat stress or heat stroke
	у.	1 🗖 No	2 🗆 Yes	Psychological condition(s) severe enough to interfere
				with daily activities
	z.	1 🗖 No	2 🗆 Yes	Personal problem(s) severe enough to interfere with
				daily activities
	aa.	1 🗖 No	2 ☐ Yes	Other condition or injury
				Please specify:
	bb.	1 🗖 No	2 🗆 Yes	Headache:
		If yes, was yo	our headache: (	Please check either "no" or "yes" for every condition)
		1 🗆 No	2 ☐ Yes	Pulsating or throbbing
		1 🗆 No	2 🗆 Yes	One-sided for at least some portion of the headache
				(can be either right or left)
		1 🗖 No	2 ☐ Yes	Severe enough to cause you to stop or decrease your
				activities
		1 🗖 No	2 🗖 Yes	Made worse by physical activity
		Was your hea	idache accompa	anied by:
		1 🗆 No	2 🗖 Yes	Visual disturbances
		1 □ No	2 ☐ Yes	Numbness or tingling
		1 □ No	2 ☐ Yes	Sensitivity to noise
		1 🗖 No	2 🗖 Yes	Sensitivity to light
		1 □ No	2 🗖 Yes	Nausea or vomiting

14.				receive a doctor's di (Please check eithe Cold or acute n Sore throat, vir Cough, viral Flu	<i>r "no" or</i> asophary	"yes" fo	
15.	a. b. c. d.	e days because (Please che 1  No 1  No 1  No 1  No	e of the reasons eck either "no"  2  Yes  2  Yes  2  Yes  2  Yes  2  Yes	or "yes" for every Health problem Emotional prob Personal proble Family problem	condition lem m		ry duties for 1 or
16.	e. 1 No 2 Yes Other  During the past 12 months, has a doctor told you that you had any of the following? (Please check one box on each line. If you check "Yes," please write your age at first diagnosis)				No (1)	Yes (2)	If yes, what was your age in years at first diagnosis?
a.	Asth	ma			O		
b.	Mig	raine headache	<b>)</b>				
c.	Anei	nia		-	D	O	
d.	Depr	ession				٥	
e.	_	orrhea					
f.	Syph	ilis				0	
g.		mydia				J	
h.		ary tract infec	tion				
i.		ey infection					
j.		ia (other than	hiatal)				
k.		exia or bulim			J		
1			me) A B	C	П	П	

17.	During the past 30 days did you visit sick call, a	•	
	provider to obtain care for yourself for any of the fol		Check as many as
	apply and fill in the number of visits for each reason	ı.)	
	☐ Acute physical illness, not OB-GYN	No. of visits: 1)2	)345 or more
	2 ☐ Chronic physical illness, not OB-GYN	No. of visits: 1)2	)3(4(5) or more
	3 ☐ Old or chronic injury	No. of visits: 1)2	)3(4(5) or more
	4 ☐ Health maintenance or preventive screening	No. of visits: ①②	345 or more
	5 ☐ Acute injury	No. of visits: 1)2	(3)(4)(5) or more
	6 ☐ Psychological or emotional condition	No. of visits: 12	345 or more
	7 ☐ Pregnancy test or to pick up test kit		
	8□ OB-GYN care		
	9 □ Other		
18.	Approximately how many months or days ago was		Number of days
	your:	Number of	(If less than 1
	(Fill in number of months or days for each item)	months	month)
а.	Most recent visit to a medical doctor?		
b.	Most recent visit to another health care professional? (Please specify type of provider, e.g., psychologist, dentist, nurse-practitioner):		
C.	Most recent visit to a hospital corpsman?		

# OCCUPATIONAL EXPOSURES

19.	Have you been exposed during the any of the factors listed below?	: past	t <b>30 d</b> a	ıys to	If 3	yes:
answ	Exposure eck one box on each line. If you ver "yes" to any question, please plete all items on that line.)	No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week
a.	Adhesives or gluing compounds		О	o		
b.	Asbestos (loose)	О	a			
c.	Carbon monoxide	□	О	О		
d.	Diesel exhaust within 50 feet	0	a	o		
e.	Diesel fuel within 50 feet		O			
f.	Dry cleaning solvent	0	0	O		
g.	Exhaust from gasoline engine		П	٥		
h.	Gasoline (liquid or vapor)	O		□		
i.	Guided missile fuel	O		ם		
j.	High temperature (above 95° F)	О	a	0		
k.	Hypodermic needles (used)	ø	O .			
1.	Insecticides	o	а			
m.	Jet exhaust within 50 feet		O			
n.	Jet fuel within 50 feet	_	σ			
0.	Lifting 25 - 49 pounds		0			
p.	Lifting 50 or more pounds	O	o	0		
q.	Loud noise (such as jets)	٥	O	ם		
r.	Low temperature (below 32°F)	0	o	0		
s.	Metal scrapings or filings	О	О			

19.	Continued Have you been expense 30 days to any of the factors l		_	•	If y	ves:
answ	Exposure ck one box on each line. If you ver "yes" to any question, please volete all items on that line.)	No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week
t.	Paint (oil based) or thinner			О		
u.	Paint, other or unknown type	☐				
v.	Paint scrapings or paint sanding	a		0		
w.	Solvent or degreaser		ø	□		
х.	Torpedo fuel			0		
y.	Other chemicals (Please specify):					
z.	Video display terminal (VDT, CRT)	0	0	0		
aa.	Welding fumes		О			
bb.	Dust or particles					
cc.	Explosives (nonnuclear) within 50 feet					
dd.	Nitrous oxide	σ	О	O		
ee.	Ethylene dibromide (EDB)		О	٥		
ff.	Perchlorethylene (PERC)			0		
gg.	Have you ever worn a radiation dosimeter or film badge while working aboard ship?				Year first worn	Year last worn  19

# 1018530708

20.	Have you smoked at least 100 cigarettes in your entire life? (Check one box)							
	1 🗍 2 🗍	No (Please skip to question 23) Yes						
21.	On h	ow many of the past 30 days did you smoke cigarettes? (Check one box)						
21.	0 🗆	None						
	1 🗆	1-4 days						
	2 🗆	5-9 days						
	3 🗍	10-14 days						
	4 🗇	15-19 days						
	5 🗇	20-24 days						
	6 🗖	25-29 days						
	7 🗖	Every day						
	9 🗖	Not sure						
22.	On average how many cigarettes did you smoke per day during the past 30 days? (Check one box)							
	оП	None						
	1 🗖	Fewer than 1 cigarette a day, on the average						
	2 🗖	1-4 cigarettes						
	з 🗖	5-9 cigarettes						
	4 🗖	10-19 cigarettes						
	5 🗖	20-29 cigarettes						
	6 🗖	30-39 cigarettes						
	7 🗖	40-49 cigarettes						
	8 🗖	50 or more cigarettes						
	9 🗖	Not sure						
23.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour or more per day in your immediate work area? (Check one box)							
	1 🗖	No						
	2 🗖	Yes						
	9 🗖	Not sure						
24.		ig the past 30 days, have you been exposed to tobacco smoke for one (1) hour or						
	more	per day in your sleeping area or other non-working area? (Check one box)  No						
	2 🗇	Yes						
	9 🗖	Not sure						
	7 🚅	TAOL SUIC						

25.	During the past 30 days, have you used any other form of tobacco? (Check all that apply)  O
26.	During the past 7 days, on how many days did you have any alcoholic beverages? (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦  (If you filled in 0, please skip to question 29)
27.	On the days you drank any alcoholic beverage during the past 7 days, how many drinks did you usually have per day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (1) If more, please give no.:
28.	During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) If more, please give no.:
29.	In an average 7 days, on how many days do you engage in exercise or sports that lasts at least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦ days
30.	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦ days
31.	My current:  a. Weight is pounds.  b. Height is feet and inches.
32.	During the past 30 days have you: (Check one box)  1 □ Gained weight, pounds  2 □ Lost weight, pounds  3 □ Stayed the same

33.	sun for direct	the average during the past month, how many days per week were you outside in the or 20 minutes or more between 10:00 AM and 2:00 PM? ("In the sun" refers to any exposure to the sunlight, even when the sky was cloudy.) (Fill in one circle)  (a) (a) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d
34.		e days marked above, on the average how long were you outside in the sun per day
		een 10:00 AM and 2:00 PM? (Check one box)
	1 🗇	20-44 minutes
	2 🗖	45-59 minutes
	3 🗍	1 hour
	4 🗍	2 hours
	5 🗍	3 hours
	6 🗖	4 hours
35.	Do yo	ou or your partner currently use any form of birth control to prevent pregnancy?
	•	se check all that apply)
	ı 🗇	Yes, birth control pills
	2 🗇	Yes, condoms or rubbers
	3 🗖	Yes, spermicidal foam or jelly
	4 🗖	Yes, Depo Provera
	5 🗖	Yes, Norplant
	6 🗖	Yes, intrauterine device (IUD)
	7 🗖	Yes, diaphragm
	8 🗖	Yes, other (please specify)
	9 🗖	No, because of a vasectomy or tubal ligation (tubes tied)
	10 🗖	No, I am (or my partner is) sterile
	11 🗖	No, I am not sexually active
	12 🗖	No, I (we) use no method of birth control

36.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.	O			O	0
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	σ	o	0	٥	٥
c.	I would not have sexual intercourse without using birth control.					
d.	I would have sexual intercourse without birth control if my partner wanted me to.	٥				٥
e.	Sometimes when a birth control method is not available. I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.					
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.	О	а		О	٥

				(VI (O) (O)	,					
37.	past	many days during the 7 days have you: ck one box on each	No days (0)	One day (1)	Two days (2)	Three days (3)	Four days (4)	Five days (5)	Six days (6)	Seven days (7)
a.	Felt going	you just couldn't get					D	O	О	a
b.	Felt	sad?	0	0	a	О	0	O	О	o
C.		trouble getting to sleep nying asleep?	О						О	О
đ.	Felt t	that everything was an								
e.	Felt I	onely?						O	ם	
f.	Felt y blues	you couldn't shake the?	٥	o	٥	σ	a	0	٥	σ
g.		rouble keeping your on what you were ?	0						0	
			F	AMIL	Y					
38.	Famil	ly composition (Unmarried men and wother person in a maried No 2 Types		•			•		th a sig	nificant
	b.	Are you a parent?  1 □ No 2 □ Yes								
	c.	How many children currently live in your l	-	-	ted, or	stepchi childre		under 1	the age	of 21
	d.	Are you a single parent for raising one or more a spouse present.)  1  No 2  Yes			-			•	•	•

# WOMEN'S SECTION

39.	Reproductive system health	condition	ou have the during the heck one b	past 90	experienc it get wor 90 days?	did you first the condition, or did se, during the past (Check one box on if answer to the is "yes")		
	Condition	No (1)	Yes (2)	Not sure (9)	No (1)	Yes (2)	Not sure (9)	
a.	Bleeding between periods			□	J	П	О	
b.	Cramps or pain during menstrual period requiring medication or time off work		٥		0	٥	0	
c.	Cramps or pain during menstrual period not requiring medication or time off work.	Ø	O	O				
d.	Excessive frequency of periods (time between periods too short)	o	σ	٥	٥	٥	a	
e.	Heavy periods (excessive menstrual flow)	O						
f.	Period lasting longer than 1 week		0		0			
g.	Scanty menstrual flow	П	ø	O	O	O	О	
h.	Abdominal pain (from known cysts)		D	0	0	٥	0	
i.	Abdominal pain (from known endometriosis)							
j.	Abdominal pain (from other or unknown cause)	0	0				0	
k.	Discharge from breast	IJ		П		O	J	
1.	Breast lump				0	0		

40.	Did any of the conditions listed above (a through 1) require you to:							
	a.	Take 2 or more hours off work during the past 90 days? (Check one box)  1 \( \subseteq \text{No} \)  2 \( \subseteq \text{Yes (Specify which condition(s):)} \)						
	b.	Miss 1 or more days of work during the past 90 days? (Check one box)  1 □ No  2 □ Yes (Specify which condition(s):)						
41.	Mens a.	trual periods  During the past 12 months have you had regular menstrual periods? (Check one box)  1  No (Please explain):						
		Yes, about 1 per month.  Yes, but not 1 per month. (Please explain):						
	b.	If you missed one or more periods during the past 12 months, please check one box below:  1  I missed my period approximately time(s) during the past 12 months.  0  I had no periods at all during the past 12 months.  9  I'm not sure of the number of periods I missed during the past 12 months.						
42.		ng the past 90 days have you taken birth control pills to regulate your periods?  k one box)  2  Yes						
43.	Durin 1	g the past 90 days have you taken replacement estrogens? (Check one box)  No  Yes, hormone pills.  Yes, hormone creams or other hormone preparations.						

44.	Did :	you have any	of the followi	ng conditions during the p	past 90	days?	' (Please check					
		r "no" or "ye										
	a.	1 🗖 No	2 🗆 Yes	<b>3</b>								
	b.	1 □ No	2 ☐ Yes	Vaginal rash, discharge, or other vaginal disor								
				except yeast infectio	n, no	t inclu	iding sexually-					
	c.	1 🗖 No	2 🗖 Yes	Yeast infection								
	d.	1 🗖 No	2 🗖 Yes	Pelvic or lower abdominal pain								
	e.	1 🗖 No	2 🗖 Yes	Gonorrhea								
	f.	1 🗆 No	2 🗆 Yes	Other sexually-transmi								
	g.	1 🗖 No	2 ☐ Yes	Other genitourinary sy rase specify):			n					
			(File	use specify)								
45.	Did a	Did any of the conditions listed above (a through g) require you to:										
	a.											
		(Check one box)										
		1 No										
	2 ☐ Yes (Specify which condition(s)):											
	b. Miss 1 or more days of work during the past 90 days? (Check one box)											
	1 □ No											
	2 ☐ Yes (Specify which condition(s)):											
						·						
46.	Has a	doctor ever	told you that yo	ou had any of the	<b>,</b>		If yes, what					
	follov	ving?					was your age					
					NT-	37	in years at					
				ne. If you check "Yes,"	No (1)	Yes (2)	first diagnosis?					
***************************************	please	e write your o	age at first diag	rnosis.)	(1)	(2)	uiagiiosis:					
a.	Abno	rmal Pap sme	ear (test for cer	vical cancer)	0	O						
b.	Breast lump diagnosed as benign breast cyst or fibrocystic											
	diseas	se (Please spe	ecify):									
C.	Benig	n breast lumj	o, exact diagno	sis unknown	O	0						
d.	Breas	t cancer										
		<del></del>										

# PREGNANCY

47.	How many times have you been pregnant? (Check one box)							
	0 🗖	Never (Please skip to question 51)						
	1 🗇	I have been pregnant times.						
48.	Are y	you pregnant now? (Check one box)						
	1 🗇	No						
	2 🗖	Yes						
	9 🗖	Not sure						
49.	Recei	nt pregnancies						
	a.	Have you been pregnant during the past 12 months? (Check one box)  1 □ No (Skip to question 5I)  2 □ Yes						
	b.	How many times have you been pregnant during the past 12 months? times.						
	c.	Were you serving aboard this ship when you were informed you were pregnant?  1 □ No (Skip to question 51)  2 □ Yes						
	d.	How many weeks did you serve aboard this ship after your command was notified of your pregnancy?weeks.						
	e.	Were you transferred ashore due to pregnancy?  1 □ No (Skip to question 5I)  2 □ Yes						
	f.	How many weeks pregnant were you when transferred off this ship? weeks.						

50.	Please provide the following information in chronological order for the past 12 months.
	For multiple outcomes, make each a separate entry (e.g., two entries for twins). Indicate
	only one "outcome" per pregnancy. If you are uncertain of a detail, provide your best
	estimate.

estimate.								
Pregna	ıncy		Outcome	What was the approximate date of this outcome?	Were you in the Navy at the time?	1	was your duty ype at the time: at out- come	Was this pregnancy planned?
a. Most recen	t   E	] 2 S ] 3 M s a ] 4 E p	Live Birth Stillbirth Miscarriage/ pontaneous bortion Setopic bregnancy Elective induced bortion	Year 19 Month	□ 1 No □ 2 Yes	□ 1 □ 2 □ 3 □ 4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes
b. Prior pregn (or tw	iancy C	12 S 13 M sp a 14 E p 15 E	Live Birth  Stillbirth  Aiscarriage/  pontaneous  bortion  Stopic  regnancy  Elective induced  bortion	Year 19 Month	□ 1 No □ 2 Yes	☐ 1 ☐ 2 ☐ 3 ☐ 4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes

51.	What is your best estimate of the likelihood that you will become pregnant in the next 12
	months?
	(Fill in a number between 0 and 100, with 0 representing no chance that the event will
	occur, and 100 representing that the event definitely will occur): percent

### 

52.	Please rate your agreement or disagreement with each of the following statements. (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	I hope to become pregnant during the next 12 months.	O	۵	۵	٥	
b.	I probably will become pregnant during the next 12 months.	O	O	О	О	0
c.	My partner objects to use of birth control measures.	D	ø	O		٥
d.	Using birth control is inconvenient.			0	0	
ę.	I would not use birth control pills because I am concerned about possible health effects.					0
f.	A sexually active woman who uses an intrauterine device (IUD) is not very likely to become pregnant.	ם		0		۵
g.	A sexually active woman who uses a diaphragm and contraceptive gel is not very likely to become pregnant.					
h.	A sexually active woman whose partner always uses a condom is not very likely to become pregnant.	٥	٥	0		٥

# OB/GYN AVAILABILITY

53.	Pre-deployment OB-GYN visit							
<i>) 3</i> .	a.	Have you deployed at sea for 30 days or more at any time during the past 12 months?  1  No (Skip to Comments and Suggestions on the last page)  2  Yes						
	b.	Preceding deployment, did you request a pre-deployment appointment with a gynecologist or obstetrician from a Navy medical facility?  1  No (Skip to Comments and Suggestions on the last page)  2  Yes						
	c.	If yes, print below the month and year you requested the appointment: , 19 Month Year						
	d.	Were you given a gynecological or obstetrical appointment? (Check one box)  1  No (Skip to Comments and Suggestions on the last page)  2  Yes						
	e.	Were you able to keep the appointment before deployment? (Check one box)  1 □ No  2 □ Yes						

COMMENTAL SAME SAME (SECOND)
Additional comments you would like to add:
SHEE NEW YOYEE

Please return to your shipboard coordinator or:

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

### APPENDIX C.2

Follow-up Survey Instrument, Form MA

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form MA, v.1.5, 09 Sep 96

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence: I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809
- 7 I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.

I fully understand the above statements. By my signature below, I give my voluntary informed consent to participate

in this research study as it has been expl	ained to me above.			
Signature:		Date: -		- 199
		Month	Day	Year
Permanent address	City	State	Zip Co	ode

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.
TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

### Information to Participants

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief. Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center. San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

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- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
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- 8. I fully understand the above statements.

### **Information to Participants**

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Today	y's date:	Mon	th:	Day	':	_ Year: 1	99
What 1			s? (Check oi	ne box	¢)		
What	is your pay gra	ade? (Circle o	one)				
Ī	<u>Enlisted</u>	Warrant <u>Officer</u>	Off	icer			
					5		
E-1	E-6	W-1	O-1 O-2	O· O·			
E-2 E-3		W-2	O-2 O-3	O.	-0		
H_4	E-8	W-3					
	E O	N/ A					
E-4 E-5 If you	E-9 1 are Navy enli						
E-4 E-5 If you	ı are Navy enli ı are Marine en	sted, what is y	your rating (	.S. nu	mber? _		
E-4 E-5 If you If you How	ı are Navy enli	sted, what is y ulisted, what is	your rating ( s your M.O. 1 your work	.S. nu grouj	mber? _		
E-4 E-5 If you If you How Numb	i are Navy enli i are Marine en many people ci	sted, what is yalisted, what is urrently are ir	your rating ( s your M.O. n your work umber of wo	.S. nu grouj men:	mber? _ o?		
E-4 E-5 If you If you How Numb To wi	n are Navy enling are Marine end many people contract of men:  hat ship or com	sted, what is your listed, what is your rently are in Numand are you	your rating ( s your M.O s your work s mber of wo s currently a	.S. nu grouj men:	mber? _ o?		
E-4 E-5 If you If you How Numb To win What	are Navy enling are Marine ender of men:  hat ship or coming is your departing are not ment are	sted, what is your control of the co	your rating of your M.O. In your work amber of wo in currently a cone box)	group group men:	mber? _ o? ———— ed?		
E-4 E-5 If you If you How Numb To wi What	are Navy enlinare Marine en many people coper of men:  hat ship or comes your departed.  Administration	sted, what is your control of the co	your rating of your M.O.  I your work umber of wo a currently a cone box)	group group men:	mber? _ o? ——— ed?  Navigat	ion	
E-4 E-5 If you If you How Numb To wi What	are Navy enling are Marine en many people control or combat ship o	sted, what is your control of the co	your rating of your M.O. In your work amber of wo in currently a currently a cone box)	groupmen:	mber? _ o? ed?  Navigat Operatio	ion	
E-4 E-5 If you If you How Numb To wi What 1 □ 2 □ 3 □	i are Navy enli i are Marine en many people co per of men: hat ship or com is your departs Administration Air Communication	sted, what is your control of the co	your rating of your M.O.  I your work umber of wo a currently a cone box)	groupmen:	mber? _ o? ———ed?  Navigat Operation Reactor	ion	
E-4 E-5  If you How Numb  To win What 1	is your departing Administration Air Communication	sted, what is your control of the co	your rating of your M.O.  I your work amber of wo in currently a currently a cone box)	groupmen:	mber? ed?  Navigat Operation Reactor Repair	ion	
E-4 E-5 If you If you How Numb To wi What 1 □ 2 □ 3 □	i are Navy enli i are Marine en many people co per of men: hat ship or com is your departs Administration Air Communication	sted, what is your control of the co	your rating of syour M.O.  I your work unber of wo in currently a	groupmen:	mber? _ o? ———ed?  Navigat Operation Reactor Repair Supply	ion	

9.	If you are currently aboard ship, what is your ship's current status? (Check one box)							
	1	In home po At sea	rt	3	•			
10.	Deplo a.	(For purpos "Ship sche	times have you	tionnaire	ed during the past 12 months? e, deployment is defined as: es or more")			
	b.	(Check one	(Please skip to					
	c.		lid you begin t	_				
11.	Have 1 □ 2 □	you deployed No Yes	I in the Bosnia	area dur	ring the past 12 months? (Check one box)			
12.	Wher	e do you live Aboard shi Navy housi	p	p is in yo 3 ☐ 9 ☐	our home port? ( <i>Check one box</i> ) BEQ/BOQ Other			
			FIEAL	NEL 6 (0)	NOTE EN CONTROL	****		
13.	result	ed in a visit t	of these health o sick call or a er "no" or "yes 2  Yes	health can for ever Common Dizzing Chills Cougar Sore of Fever Flu Diarr	ery condition) mon cold symptoms iness s th throat	it		

13.	Con	atinued Have	you had any	of these health conditions during the past 30 days
	whetl	<mark>her or not</mark> it re	sulted in a visi	t to sick call or a health care provider?
	(Plea	se check either	"no" or "yes"	for every condition)
	j.	1 🗖 <b>N</b> o	2 ☐ Yes	Constipation
	k.	1 <b>□</b> No	2 ☐ Yes	Indigestion
	1.	1 🗖 No	2 🗖 Yes	Nausea or vomiting
	m.	1 🗖 No	2 ☐ Yes	Sinus trouble
	n.	1 🗖 No	2 ☐ Yes	Hay fever
	ο.	1 □ No	2 ☐ Yes	Shortness of breath
	p.	1 🗖 No	2 ☐ Yes	Hoarseness
	q.	1 🗖 No	2 ☐ Yes	Skin problems
	r.	1 🗖 No	2 ☐ Yes	Muscle sprain or strain
	S.	1 🗖 No	2 🗖 Yes	Back problems
	t.	1 🗆 No	2 🗖 Yes	Hearing problems
	u.	1 □ No	2 🗖 Yes	Irritated eyes
	v.	1 □ No	2 ☐ Yes	Trouble seeing with one or both eyes even if wearing glasses or contacts
	w.	1 □ No	2 🗖 Yes	Pain in stomach or abdominal area
	x.	1 🗖 No	2 🗖 Yes	Heat stress or heat stroke
	у.	1 🗖 No	2 ☐ Yes	Psychological condition(s) severe enough to interfere with daily activities
	z.	1 <b>□</b> No	2 ☐ Yes	Personal problem(s) severe enough to interfere with daily activities
	aa.	1 □ No	2 ☐ Yes	Other condition or injury Please specify:
	bb.	1 □ No	2 ☐ Yes	Headache:
	00.			Please check either "no" or "yes" for every condition)
		1 □ No	<sup>2</sup> ☐ Yes	Pulsating or throbbing
		1 □ No	2 ☐ Yes	One-sided for at least some portion of the headache
		10 110	20 20	(can be either right or left)
		1 □ No	2 ☐ Yes	Severe enough to cause you to stop or decrease your
				activities
		1 🗖 No	2 ☐ Yes	Made worse by physical activity
		Was your hea	adache accompa	
		1 🗖 No	2 ☐ Yes	Visual disturbances
		1 🗖 No	2 ☐ Yes	Numbness or tingling
		1 🗖 No	2 ☐ Yes	Sensitivity to noise
		1 🗖 No	2 ☐ Yes	Sensitivity to light
		1 🗖 No	2 🗖 Yes	Nausea or vomiting

14.				eceive a doctor's di			
	_			(Please check either		-	r every condition)
		No	2 ☐ Yes	Cold or acute n		ngitis	
		No	2 TYes	Sore throat, vir	al		
		No No	2 □ Yes 2 □ Yes	Cough, viral Flu			
	<b>u</b> . 10	110	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Tu			
15.	_	-		u been unable to po	erform yo	our milita	ry duties for 1 or
	•		of the reasons		1:4:	`	
		ease cned No		or "yes" for every		.)	
		No	2 ☐ Yes 2 ☐ Yes	Health problem Emotional prob			
		No	2 D Yes	Personal proble			
		No	2 D Yes	Family problem			
		No	2 ☐ Yes	Other	•		
16.	During the	past 12	months, has a	a doctor told you			If yes, what
	-	-	_	? (Please check			was your age in
				ck "Yes," please	No	Yes	years at first
	write your	age at fi	rst diagnosis)		(1)	(2)	diagnosis?
a. A	Asthma					□	
b. N	Aigraine head	lache					
c. A	.nemia				٥	J	
d. D	Depression						
e. C	onorrhea				O		
f. S	yphilis				O		
g. C	?hlamydia				O		
h. U	Jrinary tract	infection			О		
i. K	Lidney infecti	on			g		
j. H	Iernia (other	than hiat	al)				
k. A	norexia or b	ulimia			O		
1. H	lepatitis (Cir	cle type)	A B C		П		

17.		g the past 30 days did you visit sick call, a m		
	-	ler to obtain care for yourself for any of the follo	•	Check as many as
•		and fill in the number of visits for each reason.	•	
	10	Acute physical illness N		
	2 🗍	Chronic physical illness N		
	3 🗍	Old or chronic injury N	o. of visits: (1)(2)	(3)(4)(5) or more
	4 🗍	Health maintenance or preventive screening	o. of visits: (1)(2)	(3)(4)(5) or more
	5 🗖	Acute injury N		
	6 🗖	Psychological or emotional condition N		
	9 🗖	Other N		
18.	Appı	oximately how many months or days ago was		Number of days
	your	:	Number of	(If less than 1
	(Fill	in number of months or days for each item)	months	month)
a. ]	Most rec	ent visit to a medical doctor?		
Ь	Most rec	ent visit to another health care professional?		
		specify type of provider, e.g., psychologist,		
4		nurse-practitioner):		
		····················/·		
c. 1	Most rec	ent visit to a hospital corpsman?		
				************************************

# OCCUPATIONAL EXPOSURES

19. Have you been exposed during the <b>past 30 da</b> any of the factors listed below?					If yes:		
l complete all items on that line l		No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week	
a.	Adhesives or gluing compounds	ⅎ	□	o			
b.	Asbestos (loose)						
c.	Carbon monoxide		0	□			
d.	Diesel exhaust within 50 feet			o			
e.	Diesel fuel within 50 feet						
f.	Dry cleaning solvent	0		o			
g.	Exhaust from gasoline engine	O					
h.	Gasoline (liquid or vapor)	0		o			
i.	Guided missile fuel	O					
j.	High temperature (above 95° F)	o	0				
k.	Hypodermic needles (used)	□		□			
1.	Insecticides	Image: control of the					
m.	Jet exhaust within 50 feet		О				
n.	Jet fuel within 50 feet			D			
0.	Lifting 25 - 49 pounds						
p.	Lifting 50 or more pounds						
q.	Loud noise (such as jets)						
r.	Low temperature (below 32°F)						
S.	Metal scrapings or filings						

19.	Continued Have you been expense 30 days to any of the factors I	If yes:				
Exposure (Check one box on each line. If you answer "yes" to any question, please complete all items on that line.)		No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week
t.	Paint (oil based) or thinner		ם			
u.	Paint, other or unknown type					
٧.	Paint scrapings or paint sanding		ם			
w.	Solvent or degreaser	O				
х.	Torpedo fuel		0			
y.	Other chemicals (Please specify):					
Z.	Video display terminal (VDT, CRT)					
aa.	Welding fumes			П		
bb.	Dust or particles					
cc.	Explosives (nonnuclear) within 50 feet			ם		
dd.	Nitrous oxide	□				
ee.	Ethylene dibromide (EDB)	O		٥		
ff.	Perchlorethylene (PERC)	0	O			
gg.	Have you ever worn a radiation dosimeter or film badge while working aboard ship?				Year first worn	Year last worn

# 

20.	Have 1 □ 2 □	you smoked at least 100 cigarettes in <b>your entire life</b> ? (Check one box) No (Please skip to question 23) Yes
21.	0 🗖	ow many of the <b>past 30 days</b> did you smoke cigarettes? ( <i>Check one box</i> )  None  1-4 days
	2	5-9 days 10-14 days 15-19 days 20-24 days 25-29 days Every day
	9 🗖	Not sure
22.		verage how many cigarettes did you smoke per day during the past 30 days?  None Fewer than 1 cigarette a day, on the average 1-4 cigarettes 5-9 cigarettes 10-19 cigarettes 20-29 cigarettes 30-39 cigarettes 40-49 cigarettes 50 or more cigarettes Not sure
23.		g the <b>past 30 days</b> , have you been exposed to tobacco smoke for one (1) hour or more by in your immediate work area? ( <i>Check one box</i> )  No  Yes  Not sure
24.		g the <b>past 30 days</b> , have you been exposed to tobacco smoke for one (1) hour or more by in your sleeping area or other non-working area? ( <i>Check one box</i> )  No  Yes  Not sure

25.	During the past 30 days, have you used any other form of tobacco? (Check all that apply	y)
	0 □ None	
	1  Cigars	
	2  Pipe	
	3 ☐ Smokeless tobacco (snuff or chew)	
26.	During the past 7 days, on how many days did you have any alcoholic beverages? (Fi	ill
	in one circle)	
	(If you filled in 0, please skip to question 29)	
27.	On the days you drank any alcoholic beverage during the <b>past 7 days</b> , how many drink did you usually have <b>per day</b> ? (Consider a single shot, single mixed drink, glass of wine or can of beer as 1 drink.) ( <i>Fill in one circle</i> )  ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ○ If more, please give no.:	
28.	During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fin one circle)	
	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ○ If more, please give no.:	
29.	In an average 7 days, on how many days do you engage in exercise or sports that lasts a least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦ days	
30.	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦ days	
31.	My current:	
	a. Weight is pounds.	
	b. Height is feet and inches.	
32.	During the past 30 days have you: (Check one box)	
	Gained weight, pounds	
	2  Lost weight, pounds	
	3 ☐ Stayed the same	
	<del>-</del>	

33.	sun fo	the average during the past month, now many days per week were you outside in the or 20 minutes or more between 10:00 AM and 2:00 PM? ("In the sun" refers to any a exposure to the sunlight, even when the sky was cloudy.) (Fill in one circle) (2) (3) (4) (5) (6) (7) days per week. (If you filled in 0, please skip to question 35)
34.	On th	e days marked above, on the average how long were you outside in the sun per day
	betwe	een 10:00 AM and 2:00 PM? (Check one box)
	1 🗖	20-44 minutes
sui dir (0)  34. Or be 1	2 🗇	45-59 minutes
	3 🗖	1 hour
	4 🗖	2 hours
	5 🗖	3 hours
	6 🗖	4 hours
35.	Do yo	ou or your partner currently use any form of birth control to prevent pregnancy?
	•	se check all that apply)
	ì 🗇	Yes, birth control pills
	2 🗖	Yes, condoms or rubbers
	3 🗖	Yes, spermicidal foam or jelly
	4 🗇	Yes, Depo Provera
	5 🗖	Yes, Norplant
	6 🗖	Yes, intrauterine device (IUD)
	7 🗖	Yes, diaphragm
	8 🗖	Yes, other (please specify)
	9 🗖	No, because of a vasectomy or tubal ligation (tubes tied)
	10 🗖	No, I am (or my partner is) sterile
	11 🗖	No, I am not sexually active
	12 🗖	No. I (we) use no method of birth control

36.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.					
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	O	٥	0	٥	a
c.	I would not have sexual intercourse without using birth control.					П
đ.	I would have sexual intercourse without birth control if my partner wanted me to.	٥	٥	σ	O	٥
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.	0			0	0
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.	ø	٥	o	0	0

V(0)0	

37.	past '	many days during the 7 days have you: ck one box on each	No days (0)	One day	Two days (2)	Three days (3)	Four days (4)	Five days (5)	Six days (6)	Seven days (7)	
a.	Felt y	ou just couldn't get ?	D						O	۵	
b.	Felt s	ad?	a	O	0	0	0		a		
c.		rouble getting to sleep ying asleep?	J			J			٥		
d.	Felt t	hat everything was an ?	٥	٥		0		0	0	O	
e.	Felt I	onely?					J		O		
f.	Felt y blues	ou couldn't shake the?	o	o	o	٥	O	0	O	O	
đ,		rouble keeping your on what you were	o	o		٥	□	<u></u>	ם	ס	
			E.	AMIII	Y						
38.	Family composition  a. (Unmarried men and women) When you are ashore, do you live with a significant other person in a marital-like relationship? (Check one box)  1  No 2  Yes										
	b.	Are you a parent?  1 □ No 2 □ Yes									
	c.	How many children (natural, adopted, or stepchildren) <u>under the age of 21</u> <u>currently live in your household?</u> children									
	d.	<ul> <li>d. Are you a single parent? (You are a single parent if you have major responsibility for raising one or more children under 21 years living in your household without a spouse present.)</li> <li>1 □ No</li> <li>2 □ Yes</li> </ul>									

# COMMISSIONS AND SUCCESSIONS Additional comments you would like to add: THANK YOU!

Please return to your shipboard coordinator or:

Naval Health Research Center
Code 233
Post Office Box 85122
San Diego, CA 92186-5122
Telephone (619) 553-6881; DSN 553-6881

#### APPENDIX C.3

Follow-up Survey Instrument, Form WB

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



## NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form WB, v.1.5, 09 Sep 96

## Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- 7. I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.

8.	I fully understand the above statements.	By my signature below,	I give my voluntary	informed consent to participate
in this	s research study as it has been explained to	me above.		

Signature:		Date: -	,	- 199		
		Month	Day	Year		
Permanent address	City	State	Zip Co			

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.
TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of 4. Voluntary disclosure. I understand that all information Information Act. derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

## Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- 1. I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881. DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443. DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
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- 8. I fully understand the above statements.

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

1 Odda	y's date:	Mon	th:	Day:	: Year: 199
What  1	is your current Never marrie Married Separated Divorced Widowed		? (Check on	ie box	x)
What	is your pay gra	ide? (Circle or	ne)		
		Warrant			
1	<u>Enlisted</u>	<u>Officer</u>	<u>Offi</u>	cer	
					~
E-1	E-6	W-1	O-1	0-	
E-2		W-2	O-2	O-	-0
E-3	E-8	W-3 W-4	O-3 O-4		
E-4 E-5	E-9	W -4	U-4		
If you	ı are Navy enlis	sted, what is yo	our rating (e.	g., SN	N, FN BT, HM, ASM)?
•	-	-			N, FN BT, HM, ASM)?
If you How	-	listed, what is	your M.O.S.	num	ber?
If you How Numb	ı are Marine en many people cu	listed, what is a surrently are in Nun	your M.O.S. your work gr	num coup?	ber?
If you How Numb To wl	n are Marine end many people cu per of men: hat ship or com	listed, what is a surrently are in your mand are you	your M.O.S. your work gr iber of wome	num coup?	ber?
If you How Numb To wl	many people cuper of men:  hat ship or coming is your departners.	listed, what is arrently are in your mand are you content? (Check of	your M.O.S.  your work graber of wome currently assome box)	num coup? en: igned	ber?
If you How Numb To wl	i are Marine end many people cu per of men: hat ship or com is your departn Administration	listed, what is arrently are in your mand are you content? (Check of	your M.O.S.  your work graber of wome currently assome box)	num coup? en: igned	ber?
If you How Numb To wl  What	many people cuper of men:  hat ship or comparts Administration	nirrently are in y Nun mand are you nent? (Check on	your M.O.S.  your work graber of wome currently assome box)	numicoup? en: igned	ber?
If you How Numb To wl  What 1 □ 2 □ 3 □	is your departing Administration	nirrently are in y Nun mand are you nent? (Check on	your M.O.S.  your work graber of wome currently ass  one box)	numicoup? en: igned	ber?l?  Navigation Operations Reactor
If you How Numb To wl	is your departing Administration Air Communication	nirrently are in y Nun mand are you nent? (Check on	your M.O.S.  your work graber of wome currently ass  one box)  6 1  8 1  9 1	numl roup? en: igned	ber?l? Navigation Operations Reactor Repair
If you How Numb To wl  What	is your departing Administration	nirrently are in y Nun mand are you nent? (Check on	your M.O.S.  your work graber of wome currently ass  one box)	numicoup? en: igned	ber?l?  Navigation Operations Reactor

9.	If you are currently aboard ship, what is your ship's current status? (Check one box)						
	î 🗖	In home port		3 🗖	In port other than home port		
	2 🗖	At sea		4 🗇	In shipyard		
				9 🗖	Other (Please specify):		
10.	_	yment status	1 1		11: 4 412		
	a.		•	~ .	I during the past 12 months?		
			s of this questic uled at sea for 3		deployment is defined as:		
		Time	-	ov uuys	or more		
		7 Mil					
	b.	Are you curre	ently deployed (	(30 day	s or more)?		
		(Check one b	•				
	1 $\square$ No (Please skip to question 11)						
		2 ☐ Yes					
	c.	What date did you begin this deployment?					
	<b>C.</b>	Mo.: Day: Year: 199					
11.	-		n the Bosnia are	ea durin	g the past 12 months? (Check one box)		
	1 🗆	No					
	2 🗖	Yes					
12.	Where	e do vou live w	hen vour ship is	s in vou	r home port? (Check one box)		
	1 🗆	Aboard ship		3 🗍	BEQ/BOQ		
	2 🗖	Navy housing	5	9 🗖	Other		
<b>8000000000000000000000000000000000000</b>				***************************************			
			BIB ALL II	100	IDITIONS		
***************************************							
13.	Have you had any of these health conditions during the past 30 days whether or not it						
			sick call or a hea				
			"no" or "yes",				
	a. L	1 🗆 No	2 ☐ Yes 2 ☐ Yes	Comm	on cold symptoms		
	b.	1 □ No 1 □ No	2 ☐ Yes	Chills	less		
	c. d.	1 🗆 No	2 ☐ Yes	Cough			
	e.	1 🗆 No	2 ☐ Yes	Sore th			
	f.	1 🗆 No	2 ☐ Yes	Fever			
	g.	ı □ No	2 ☐ Yes	Flu			
	h.	1 □ No	2 ☐ Yes		ea lasting at least 3 days		
	i.	1 🗆 No	2 🗖 Yes	Stoma	ch problems		

13.	Con	tinued Have y	ou had any of t	hese health conditions during the past 30 days
	wheth	er or not it res	ulted in a visit	to sick call or a health care provider?
	(Pleas	e check either	"no" or "yes",	for every condition)
	j.	1 🗆 No	2 ☐ Yes	Constipation
	k.	1 🗖 No	2 🗖 Yes	Indigestion
	1.	1 🗆 No	2 ☐ Yes	Nausea or vomiting
	m.	1 🗖 No	2 ☐ Yes	Sinus trouble
	n.	1 🗖 No	2 ☐ Yes	Hay fever
	ο.	1 🗖 No	2 ☐ Yes	Shortness of breath
	p.	1 🗖 No	2 ☐ Yes	Hoarseness
	q.	1 🗖 No	2 ☐ Yes	Skin problems
	r.	1 🗖 No	2 ☐ Yes	Muscle sprain or strain
	s.	1 🗖 No	2 ☐ Yes	Back problems
	t.	1 🗖 No	2 ☐ Yes	Hearing problems
	u.	1 🗖 No	2 □ Yes	Irritated eyes
	v.	1 🗖 No	2 ☐ Yes	Trouble seeing with one or both eyes even if
				wearing glasses or contacts
	w.	1 🗖 No	2 ☐ Yes	Pain in stomach or abdominal area
	х.	1 🗖 No	2 ☐ Yes	Heat stress or heat stroke
	у.	1 🗆 No	2 🗖 Yes	Psychological condition(s) severe enough to
				interfere with daily activities
	z.	1 🗆 No	2 ☐ Yes	Personal problem(s) severe enough to interfere with
				daily activities
	aa.	ı 🗆 No	2 ☐ Yes	Other condition or injury
				Please specify:
	bb.	1 🗆 No	2 ☐ Yes	Headache:
		If yes, was yo	ur headache: (A	Please check either "no" or "yes" for
		every condition	on)	
		1 🗆 No	2 🗖 Yes	Pulsating or throbbing
		1 🗆 No	2 🗖 Yes	One-sided for at least some portion of the headache
				(can be either right or left)
		1 🗖 No	2 ☐ Yes	Severe enough to cause you to stop or decrease your
				activities
		1 □ No	2 ☐ Yes	Made worse by physical activity
		•	dache accompa	· · · · · · · · · · · · · · · · · · ·
		1 🗖 No	2 ☐ Yes	Visual disturbances
		1 🗖 No	2 🗖 Yes	Numbness or tingling
		1 🗖 No	2 🗖 Yes	Sensitivity to noise
		1 🗖 No	2 ☐ Yes	Sensitivity to light
		1 🗆 No	2 ☐ Yes	Nausea or vomiting

14.	During the <b>past 30 days</b> did you receive a doctor's diagnosis of any of these from a health care provider <b>not on this ship</b> ? ( <i>Please check either "no" or "yes" for every condition</i> )							
	a.	1 □ No	2 ☐ Yes	Cold or acute na	asonharvn	oitis		
	b.	1 🗆 No	2□ Yes	Sore throat, vira	1 . 0			
	c.	1 □ No	2 ☐ Yes	Cough, viral				
	d.	1 🗆 No	2□ Yes	Flu				
15.	more	e days because	of the reasons		•	military	duties for 1 or	
				" for every condition				
	a.	1 🗆 No	2 🗖 Yes	Health problem				
	b.	1 🗖 No	2 🗖 Yes	Emotional prob				
	c.	1 🗖 No	2 ☐ Yes	Personal proble				
	d.	1 🗆 No	2 🗆 Yes	Family problem	l			
	e.	ı 🗖 No	2□ Yes	Other				
16.			·	doctor told you			If yes, what was	
		•	•	(Please check			your age in	
				t "Yes," please	No	Yes	years at first	
	write	e your age at fi	rst alagnosis)		(1)	(2)	diagnosis?	
a.	Asth	ma			П			
b.	Mig	raine headache			0			
c.	Anei	mia			0	O		
d.	Depi	ression			0	a		
e.	Gon	orrhea			0	J		
f.	Syph	nilis			0	٥		
g.	Chla	mydia			O	O		
h.	Urin	ary tract infect	ion	-	٥			
i.	Kidr	ey infection			0	ח		
j.	Hern	ia (other than l	hiatal)		0			
k.	Anoi	exia or bulimi	a		٥			
1.	Hena	atitis (Circle ty	pe) A B	C				

17.	During the <b>past 30 days</b> did you visit sick call, a me provider to obtain care for yourself for any of the fo apply and fill in the number of visits for each reason.  □ Acute physical illness, not OB-GYN	llowing reasons? (Ca.)  No. of visits: 12  No. of visits: 12	Check as many as  2345 or more				
18.	Approximately how many months or days ago was your: (Fill in number of months or days for each item)	Number of months	Number of days (If less than 1 month)				
a.	Most recent visit to a medical doctor?						
b. 	Most recent visit to another health care professional (Please specify type of provider, e.g., psychologist, dentist, nurse-practitioner):  Most recent visit to a hospital corpsman?	?					
	BIRESINYME						
19.	Have you smoked at least 100 cigarettes in your en 1 □ No (Please skip to question 22) 2 □ Yes	tire life? (Check o	ne box)				
20.							

21.	On average how many cigarettes did you smoke per day during the past 30 days?				
	(Check one box)				
	0 □ None				
	Fewer than 1 cigarette a day, on the average				
	2 ☐ 1-4 cigarettes				
	3 ☐ 5-9 cigarettes				
	4 ☐ 10-19 cigarettes				
	5 □ 20-29 cigarettes				
	6 □ 30-39 cigarettes				
	7 ☐ 40-49 cigarettes				
	8 ☐ 50 or more cigarettes				
	9 □ Not sure				
22.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour or				
	more per day in your immediate work area? (Check one box)				
	1 No				
	2  Yes				
	9 □ Not sure				
	7 Not suite				
23.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour or				
	more per day in your sleeping area or other non-working area? (Check one box)				
	1 🗖 No				
	2 □ Yes				
	9 □ Not sure				
24.	During the past 30 days, have you used any other form of tobacco? (Check all that				
	apply)				
	0 □ None				
	1 □ Cigars				
	2  Pipe				
	3 ☐ Smokeless tobacco (snuff or chew)				
25.	During the past 7 days, on how many days did you have any alcoholic beverages?				
	(Fill in one circle)				
	0 1 2 3 4 5 6 7				
	(If you filled in 0, please skip to question 28)				
26.	On the days you drank any alcoholic beverage during the past 7 days, how many				
	drinks did you usually have per day? (Consider a single shot, single mixed drink,				
	glass of wine, or can of beer as 1 drink.) (Fill in one circle)				
	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ O If more, please give no.:				

27.	day? drink	(Consider a single shot, single mixed drink, glass of wine, or can of beer as 1.) (Fill in one circle)  (3) (4) (5) (6) (7) (8) (9) (10) If more, please give no.:
28.	at lea heavi	average 7 days, on how many days do you engage in exercise or sports that lasts st 20 minutes without stopping, and that is hard enough to make you breathe er and your heart beat faster?: (Fill in one circle)  2 3 4 5 6 7 days
29.	make witho	average 7 days, on how many days do you engage in work that is hard enough to you breathe heavier and your heart beat faster that lasts at least 20 minutes out stopping?: (Fill in one circle)  2 3 4 5 6 7 days
30.	My ca a. b.	urrent:  Weight is pounds.  Height is feet and inches.
31.	Calcina.	um intake  Have you taken any calcium supplements during the past 30 days? (Check one box)  1  No 2  Yes
	b.	If yes, how many milligrams of calcium do you take per day? milligrams.
	c.	On the average, how many glasses do you usually drink <b>per day</b> of: (Fill in one circle)  1. Skim milk

32.	Canaral	Nutrition
.12.	CICHCIAI	INULLIUOII

52.	General Puttition			T	
	During the past 7 days, approximately how many times did you: (Check one box)	Never (1)	1-3 times per week (2)	4-6 times per week (3)	7 or more times per week (4)
a.	Eat high-fat meats or dairy (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream)		0		0
b.	Eat fried foods (e.g., french fries, fried chicken, fried eggs)	o	0	o	a
C.	Eat refined sugar products (e.g., cakes, pies, cookies, candies)				
d.	Eat low-fat meats or dairy (e.g., chicken or turkey without skin, low-fat milk, yogurt)	0	0	0	0
e.	Eat "leafy" vegetables (e.g., broccoli, cabbage, greens)				
f.	Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes)	0	0		0
g.	Eat fruits (e.g., apples, oranges, raisins, dried fruit, melons, bananas)		O	О	
h.	Eat high fiber foods (e.g., whole grain breads, cereals, bran)				0

During the past 30 days, on the average, how many hours of sleep did you get per 24 hours? (Fill in one circle)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ hours

34.	Do you or your partner currently use any form of birth control to prevent pregnancy?  (Please check all that apply)  Yes, birth control pills  Yes, condoms or rubbers  Yes, spermicidal foam or jelly  Yes, Depo Provera  Yes, Norplant  Yes, intrauterine device (IUD)  Yes, diaphragm  Yes, other (please specify)  No, because of a vasectomy or tubal ligation (tubes tied)  No, I am (or my partner is) sterile  No, I am not sexually active  No, I (we) use no method of birth control						
35.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	
a.	The whole idea of birth control is embarrassing to me.	O					
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	o	o		a	٥	
C.	I would not have sexual intercourse without using birth control.	ס		ם	D		
d.	I would have sexual intercourse without birth control if my partner wanted me to.	o	o	٥	0	σ	
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.	O	O		0		
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.	σ		o	0	_	

## OBABITY OF BIES

36.	How do you feel about your: (Check one box on each line)	Terrible (1)	Unhappy (2)	Mostly dissatisfied (3)	Mixed (4)	Mostly satisfied (5)	Pleased (6)	Delighted (7)
a.	Job?		o o	0			О	
b.	Personal life?		О	O	О		П	O
c.	Health and physical condition?	۵	a		O	a	٥	٥
d.	Life as a whole?		O	ø		П		Ø
e.	Family?		O	0	o		٥	0
f.	(If married) Spouse?							
g.	(If you have children) Children?	0			0		0	٥
h.	(If you live in military housing ashore) Military housing ashore?							
i.	(If you live aboard ship) Living conditions aboard ship?	0	0	0		0	0	0
j.	(If you live in other housing ashore) Other housing ashore?							0
k.	Military pay?	0	O	O		a		0

			V(0)0)I	)					
37.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day (1)	Two days (2)	Three days (3)	Four days	Five days (5)	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?	O	П	П	□	٥	D	۵	П
b.	Felt sad?	0		0	٥	0	0		0
c.	Had trouble getting to sleep or staying asleep?	□	O	۵	۵	۵			
d.	Felt that everything was an effort?	О	o		0	٥	0	0	٥
υ	Felt lonely?			О					□
f.	Felt you couldn't shake the blues?	0			0	0	0		٥
g.	Had trouble keeping your mind on what you were doing?	O	О			O			
		S	TRES	S					
38.	Think about your whole life of	over the							

38.	Think about your whole life over the						
	past 2 weeks. On the whole, how						
	much stress do you think is in your life						
	right now? (Please check one box)						

None	A little	Moderate	Quite	Extreme
at all	bit	amount	a bit	amouni
(1)	(2)	(3)	(4)	(5)

39.	Of the stress that you experience, how much comes						
	from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
a.	Financial matters	J		0	О	О	o o
b.	My personal health	O.				O	O
c.	Personal or health matters of a family member	O		J		J	O
d.	Being aboard ship	0			0	a	0
e.	Crowded conditions aboard ship						
f.	My personal safety aboard ship	0		0		0	
g.	Maintaining personal hygiene aboard ship						
h.	My lack of privacy aboard ship	٥			0	0	
i.	My inability to get enough exercise aboard ship	٥					D
j.	The lack of recreational activities aboard ship	٥		0	0		0
k.	My nutrition, the unavailability of desired foods aboard ship						
1.	The person I work for (my immediate supervisor)	٥	٥	0	0	0	0
m.	The people I work with (my peers)	ø					
n.	The people who work for me (those I supervise)	0	0	٥	٥	0	0
0.	The way things are typically done aboard ship	O		О	O		

39.	Continued Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
p.	The people with whom I share living space aboard ship						0
q.	My ability to perform my duties				ø	٥	D
r.	My career and chances for promotion	٥	0	٥	0	o	О
S.	Being able to stay in the Navy because of downsizing or force reductions	O			О		
t.	My relationship with my spouse or boyfriend/girlfriend	0		a	٥	٥	0
u.	Breaking up with my spouse or boyfriend/girlfriend because of being aboard ship						
v.	My ability to communicate with my family and friends	0		0			0
w.	My use of alcohol		O		O		
x.	My life as a whole	О		О	٥	٥	0
y.	(If you have children) My children because of being aboard ship						
Z.	(If you have children) Discipline of children	0	0			٥	
aa.	(If you have children) Child- care arrangements					ŋ	D

40.	During the <b>past 2 weeks</b> , the stresses listed above have affected my: ( <i>Please check one box on each line</i> )	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)		
a.	Personal life				О			
b.	Performance in my job			٥	0			
-								
41.	During the past 2 weeks, how well have you coped with these stresses? (Please check one box)	Not at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)		
	FAMILY A	NIDITER	ENIDS					
42. 43.	How many close friends do you have? (Please fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ or more  How many relatives do you have that you feel close to? (Please fill in one circle)							
44.	<ul> <li>① ① ② ③ ④ ⑤ or more</li> <li>Altogether, how often do you see these friends and/or relatives each month? (Check one box)</li> <li>1 ☐ Almost every day</li> <li>2 ☐ Several times a month</li> <li>3 ☐ Not very often maybe once or twice a month</li> <li>4 ☐ Seldom a few times a year</li> <li>5 ☐ Almost never</li> </ul>							
45.	Are you a member of any clubs or group  1  No 2  Yes	ps? ( <i>Che</i>	ck one bo.	<i>x</i> )				
46.	Do you belong to a church, temple, or other religious organization? (Check one box)  1 □ No 2 □ Yes							

47.	Family composition									
	a. (Unmarried men of significant other properties of the properti		•		•					
	b. Are you a parent?  1 □ No 2 □ Yes									
	c. How many childre currently live in y	-	-		•	the age	of 21			
	<ul> <li>d. Are you a single parent? (You are a single parent if you have major responsibility for raising one or more children under 21 years living in your household without a spouse present.)</li> <li>1 □ No</li> <li>2 □ Yes</li> </ul>									
	SOURCES OF HEILP									
48.	If you experienced a personal problem, how helpful would the following individuals be to you? (Check one box on each line)	Very unhelpful (1)	Somewhat unhelpful (2)	Neutral	Somewhat helpful (4)	Very helpful (5)	Not applicable (9)			
a.	Your family			O		O				
b.	Your friends on board ship	0	0	0			C			
c.	Other friends in the Navy		o							
d.	Other friends not in the Navy		o	a	0					
e.	Chaptains, ministers, or other clergy	O				o	П			
f.	Other Navy professionals	a	o o	О			o o			
g.	Your ship's leaders		J	O	O					
h.	Other professionals not in the Navy		o	o	o o	a	ø			

## 

49.	Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK. (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Nervousness or shakiness inside			J	О	□
b.	Repeated unpleasant thoughts	0	0	0	0	0
c.	Faintness or dizziness	□		D	□	
d.	Loss of sexual interest or pleasure	_				
e.	Feeling critical of others		0			
f.	The idea that someone else can control your thoughts	٥				0
g.	Feeling others are to blame for most of your troubles					
h.	Trouble remembering things				0	
i.	Feeling easily annoyed or irritated		O	ם		
j.	Pains in heart or chest					
k.	Feeling afraid in open spaces		♬			٥
1.	Feeling low in energy or slowed down					
m.	Thoughts of ending your life			O	Ø	
n.	Feeling that most people cannot be trusted	0				0
о.	Poor appetite	ם	J			О
p.	Crying easily					0
q.	Suddenly scared for no reason		ø			

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much <b>DISCOMFORT</b> that					
	problem has caused you <b>DURING THE PAST WEEK</b> . (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
r.	Temper outbursts that you could not control			0	0	0
S.	Feeling lonely even when you are with people	ŋ		٥		O
t.	Feeling blocked in getting things done		0		0	
u.	Feeling lonely		٥		6	□
v.	Feeling blue			0	0	0
w.	Worrying too much about things	О	П			□
x.	Feeling no interest in things		0	0	O	٥
у.	Feeling fearful		٥	□	ø	
z.	Your feelings are easily hurt		а		0	0
aa.	Feeling others do not understand you or are unsympathetic				O	J
bb.	Feeling that people are unfriendly or dislike you	0	0	0	0	0
cc.	Feeling inferior to others	D	IJ		٥	O
dd.	Nausea or upset stomach	О			0	0
ee.	Feeling that you are watched or talked about by others	٥				ח
ff.	Trouble falling asleep	0	0			0
gg.	Having to check and double-check what you do					
hh.	Difficulty making decisions					0

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
ii.	Feeling afraid to travel	0	О	О	O	O
jj.	Trouble getting your breath	o	O	0	0	o
kk.	Hot or cold spells	П			□	
11.	Having to avoid certain things, places or activities because they frighten you	٥		0	0	
mm.	Your mind going blank	0				
nn.	Numbness or tingling in parts of your body	a	۵		0	
00.	The idea that you should be punished for your sins					
pp.	Feeling hopeless about the future	0	ם	0		٥
qq.	Trouble concentrating	┚			Ø	
rr.	Feeling weak in parts of your body			0		
SS.	Feeling tense or keyed up		Œ	J	J	0
tt.	Thoughts of death or dying		a	o		٥
uu.	Having urges to beat, injure or harm someone	O		O	O	
vv.	Sleep that is restless or disturbed	0	0	0	0	0
ww.	Having urges to break or smash things		D	J	g	
XX.	Feeling very self-conscious with others	٥	o		0	0
уу.	Feeling uneasy in crowds	<u>o</u>	O		O	
ZZ.	Never feeling close to another person	o l				

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
aaa.	Spells of terror or panic	0	O	J		
bbb.	Getting into frequent arguments	٥	O			
ccc.	Feeling nervous when you are alone	a				•
ddd.	Others not giving you proper credit for your achievements	a	0	0	a	О
eee.	Feeling so restless you couldn't sit still	О	O	О		
fff.	Feelings of worthlessness	0	a	0	0	o
ggg.	Feeling that people will take advantage of you if you let them	ŋ			О	
hhh.	Thoughts and images of a frightening nature	0	0			
iii.	Feelings of guilt		D		ø	D
jjj.	The idea that something is wrong with your mind	0	0	ם		٥
kkk.	Spending less time with peers and friends	D	П			О

### A(0)/18/1/2/2/E(0.11/0.7/

50.	Reproductive system health	condition	ou have this during the theck one b	past 90	experienc it get wor 90 days? each line	b. If yes, did you first experience the condition, o it get worse, during the pa 90 days? (Check one box each line if answer to the condition is "yes")		
	Condition	No (1)	Yes (2)	Not sure (9)	No (1)	Yes (2)	Not sure (9)	
a.	Bleeding between periods	□	□	O	O		O	
b.	Cramps or pain during menstrual period requiring medication or time off work	٥		0	٥	0	٥	
C.	Cramps or pain during menstrual period <b>not</b> requiring medication or time off work							
d	Excessive frequency of periods (time between periods too short)	a	0	0	0	o	a	
e.	Heavy periods (excessive menstrual flow)	□				□	O	
f.	Period lasting longer than 1 week							
g.	Scanty menstrual flow	ø		J			O	
h.	Abdominal pain (from known cysts)		0			٥	O	
i.	Abdominal pain (from known endometriosis)					۵	O	
j.	Abdominal pain (from other or unknown cause)	O	0				٥	
k.	Discharge from breast				O	J		
1.	Breast lump	o						

51.	Did ar a.	Take 2 or more hours off work during the past 90 days? (Check one box)  1 \( \subseteq \text{ No}  2 \subseteq \text{ Yes (Specify which condition(s):)} \)				
	b.	Miss 1 or more days of work during the past 90 days? (Check one box)  1 □ No  2 □ Yes (Specify which condition(s):)				
52.	Menst	rual periods				
	a.	During the past 12 months have you had regular menstrual periods?  (Check one box)  1  No (Please explain):				
		<ul> <li>Yes, about 1 per month.</li> <li>Yes, but not 1 per month. (Please explain):</li> </ul>				
	b.	If you missed one or more periods during the <b>past 12 months</b> , please check one box below:				
		I missed my period approximately time(s) during the past 12 months.				
		<ul> <li>I had no periods at all during the past 12 months.</li> <li>I'm not sure of the number of periods I missed during the past 12 months.</li> </ul>				
53.	-	g the past 90 days have you taken birth control pills to regulate your periods?  so one box)  2 \(\sigma\) Yes				
54.	During 1	the past 90 days have you taken replacement estrogens? (Check one box) No Yes, hormone pills. Yes, hormone creams or other hormone preparations.				

55.	•	55. Did you have any of the following conditions during the past 90 days? (Planck)									
	either	-	es" for every co								
	a.	1 🗖 No	2 🗖 Yes	Urinary tract infection							
	b.	1 🗖 No	2 🗖 Yes	Vaginal rash, discharge, or other vaginal disorder							
				except yeast infection,	not inc	cluding	sexually-				
				transmitted diseases							
	c.	1 🗆 No	2 ☐ Yes	Yeast infection							
	d.	1 🗖 No	2 ☐ Yes		Pelvic or lower abdominal pain						
	e.	ı 🗖 No	2 ☐ Yes	Gonorrhea							
	f.	1 □ No	2 ☐ Yes	Other sexually-transmitted disease							
	g.	1 🗖 No	2 ☐ Yes	Other genitourinary system ( <i>Please specify</i> ):			n				
56.	Did any of the conditions listed above (a through g) require you to:  a. Take 2 or more hours off from work during the past 90 days?  (Check one box)  1 □ No  2 □ Yes (Specify which condition(s)):										
	b.	<ul> <li>b. Miss 1 or more days of work during the past 90 days? (Check one box)</li> <li>1 □ No</li> <li>2 □ Yes (Specify which condition(s)):</li> </ul>									
					1	<u> </u>					
57.	Has a doctor ever told you that you had any of the					If yes, what					
	following?						was your age in years at				
	(Please check one box on each line. If you check "Yes," please write your age at first diagnosis.)			No (1)	Yes (2)	first diagnosis?					
a.	Abnoi	mal Pap sm	ear (test for cer	vical cancer)							
b.	Breast lump diagnosed as benign breast cyst or fibrocystic disease ( <i>Please specify</i> ):				o o						
c.	Benig	n breast lun	np, exact diagno	sis unknown							
d.	Breast	Breast cancer			٥						

## BREGNANCY

58.	How	many times have you been pregnant? (Check one box)
	0 🗖	Never (Please skip to question 62)
	1 🗖	I have been pregnant times.
59.	Are y	you pregnant now? (Check one box)
	1 🗖	No
	2 🗖	Yes
	9 🗖	Not sure
60.	Recer	nt pregnancies
	a.	Have you been pregnant during the past 12 months? (Check one box)
		1 □ No (Skip to question 62)
		2 □ Yes
	b.	How many times have you been pregnant during the past 12 months?
		times.
	c.	Were you serving aboard this ship when you were informed you were pregnant?
		1  No (Skip to question 62)
		2 □ Yes
	d.	How many weeks did you serve aboard this ship after your command was
		notified of your pregnancy?weeks.
	e.	Were you transferred ashore due to pregnancy?
		1 □ No (Skip to question 62)
		2 ☐ Yes
	f.	How many weeks pregnant were you when transferred off this ship?
		weeks.
		<del></del>

61. Please provide the following information in chronological order for the **past 12 months**. For multiple outcomes, make each a separate entry (e.g., two entries for twins). Indicate only one "outcome" per pregnancy. If you are uncertain of a detail, provide your best estimate.

provide	your best estimate.	<b>,</b>		<b>_</b>		
Pregnancy	Outcome	What was the approximate date of this outcome?	Were you in the Navy at the time?	1	was your duty ype at the time: at out- come	Was this pregnancy planned?
a. Most recent	☐ 1 Live Birth ☐ 2 Stillbirth ☐ 3 Miscarriage/ spontaneous abortion ☐ 4 Ectopic pregnancy ☐ 5 Elective induced abortion	Year [9  Month	□1 No □2 Yes	□ 1 □ 2 □ 3 □ 4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes
b. Prior pregnancy (or twin)	☐ 1 Live Birth ☐ 2 Stillbirth ☐ 3 Miscarriage/ spontaneous abortion ☐ 4 Ectopic pregnancy ☐ 5 Elective induced abortion	Year 19 Month	□ 1 No □ 2 Yes	□ 1 □ 2 □ 3	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes

62.	What is your best estimate of the likelihood that you will become pregnant in the next
	12 months?
	(Fill in a number between 0 and 100, with 0 representing no chance that the event will
	occur, and 100 representing that the event definitely will occur): percent

### BAMILY RIANNING

			,			
63.	Please rate your agreement or disagreement with each of the following statements. (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	I hope to become pregnant during the next 12 months				٥	O
b.	I probably will become pregnant during the next 12 months.			0		a
C.	My partner objects to use of birth control measures					
d.	Using birth control is inconvenient.	0				
e.	I would not use birth control pills because I am concerned about possible health effects.					
f.	A sexually active woman who uses an intrauterine device (IUD) is not very likely to become pregnant.		٥		0	0
တ်ပ	A sexually active woman who uses a diaphragm and contraceptive gel is not very likely to become pregnant.				□	
h.	A sexually active woman whose partner always uses a condom is not very likely to become pregnant.	٥	_		a	0

******	************	**********	***********	000000000000000000000000000000000000000	**********	,000000
00°00.76.3	A 00.789	<b>♥୬୬.™</b> ≪‱.	<b>W</b>	g 1600000, 4000 TO.	<b>9 6x x</b> 333 6x	XXX.
SS 688 8 3	C-665 R RRC 1384	. YASSE P. M. SSSSE'A.	400 4300 A 600 i	81 588887A 1986 €T.•	62 <b>5</b> 6 565 22 566	50005.2

64.	was y	oximately how many months or days ago your most recent: in number of months or days for each item)	Number of months	Number of days (if less than I month)			
a.	Pap s	mear (test for cervical cancer)?					
b.	Pelvi	e examination?					
с.	Breas	reast examination by a physician or nurse?					
65.	Pre-deployment OB-GYN visit  a. Have you deployed at sea for 30 days or more at any time during the past 12 months?  1  No (Skip to Comments and Suggestions on the last page)  2  Yes						
	b.	Preceding deployment, did you request a pre-deployment appointment with a gynecologist or obstetrician from a Navy medical facility?  1  No (Skip to Comments and Suggestions on the last page)  2  Yes					
	c. If yes, print below the month and year you requested the appointment:						
	d.	Were you given a gynecological or obstetrical appointment? (Check one box)  1 □ No (Skip to Comments and Suggestions on the last page)  2 □ Yes					
	e.	Were you able to keep the appointment before deployment? (Check one box)  □ No □ Yes					

	000,414,121,412,444,101,481	eletizanio)//	
Additional comments yo	ou would like to add:		

Please return to your shipboard coordinator or:

HERANIC YOUR

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

#### APPENDIX C.4

Follow-up Survey Instrument, Form MB

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



## NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form MB, v.1.5, 09 Sep 96

## Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- 1. I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- 7. I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.

I fully understand the above statements. By my signature below, I give my voluntary informed consent to participate

8.

in this research study as it has been explained to me above.					
Signature:		Date:			- 199
		N	Ionth	Day	Yea
Permanent address	City	S	tate .	Zip (	Code

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.
TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- **Purpose.** Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

- 1. I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
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			DEMOGR	APHI(	DΛ	xΤΑ			
1.	Today's	date:	Month:		Day	/;	_ Year: 1	99	
2.	1	your current ma Never married Married Separated Divorced Widowed	rital status? (	Check o	ne bo	x)			
3.	What is	your pay grade?	(Circle one)						
4. 5. 6. 7a.	E-1 E-2 E-3 E-4 E-5 If you a How ma Number	E-6 E-7 E-8 E-9 re Navy enlisted any people curre of men:	ed, what is you ntly are in you Number	O-1 O-2 O-3 O-4 rating (e	e.g., S S. nun group nen: _	nber? ? 			
7b.	1	your departmen Administration Air Communications Deck Engineering	·	6 7 8 9		Navigation Operation Reactor Repair Supply Other (F		ecify):	

How long have you been assigned to this ship or command? Years: \_\_\_\_ and months: \_\_\_\_

8.

9.	-	u are currently <i>ck one box</i> )	aboard ship, w	hat is yo	ur ship's current status?
	ì 🗖	In home por	t	3 🗖	In port other than home port
	2 🗖	At sea		4 🗖	In shipyard
				9 🗖	Other (Please specify):
10.	Deple	oyment status			
	a.	-	imes have you	deployed	d during the past 12 months?
		(For purpose	es of this quest	ionnaire,	deployment is defined as:
		-	luled at sea for	30 days	or more")
		Tim	ies		
	b.	Are you curr	ently deployed	l (30 day	s or more)?
		(Check one b	pox)		
		,	Please skip to q	question	11)
		2□ Yes			
	c.	What date di	d you begin th	is deploy	rment?
			_ Day:		
1 1	Harra	riou domlosiod	in the Desnie e	سنسدية ممسن	as the most 12 mouths? (Check out have)
11.	nave	No No	in the bosina a	irea durii	ng the past 12 months? (Check one box)
	2 🗇	Yes			
12.		•	when your ship	-	r home port? (Check one box)
	1 🗇	Aboard ship	~	3 🗖	BEQ/BOQ Other
	2 🗖	Navy housing	g	9 🗖	Other
			HIB/AID	8 E ( ( ( ) )	VDITIONS
13.		•			s during the past 30 days whether or not it
		ed in a visit to			•
	•	se check either	•		<del>-</del>
	a. b.	1 🗖 No 1 🗖 No	2 ☐ Yes 2 ☐ Yes	Dizzir	non cold symptoms
	о. С.	1 🗖 No	2 ☐ Yes	Chills	
	d.	1 🗖 No	2 ☐ Yes	Cough	
	e.	1 🗖 No	2 ☐ Yes	Sore t	
	f.	1 🗖 No	2 🗆 Yes	Fever	
	g.	1 🗆 No	2 🗖 Yes	Flu	
	h.	1 🗖 No	2 ☐ Yes		ea lasting at least 3 days
	ì.	1 🗖 No	2 🗖 Yes	Stoma	ch problems

13.	Con	tinued Have y	ou had any of	these health conditions during the past 30 days
	wheth	er or not it res	sulted in a visit	to sick call or a health care provider?
	(Pleas	se check either	"no" or "yes"	for every condition)
	j.	1 🗖 No	2 ☐ Yes	Constipation
	k.	1 🗖 No	2 🗖 Yes	Indigestion
	1.	1 🗖 No	2 🗖 Yes	Nausea or vomiting
	m.	1 🗆 No	2 🗖 Yes	Sinus trouble
	n.	1 🗖 No	2 ☐ Yes	Hay fever
	0.	1 🗖 No	2 🗖 Yes	Shortness of breath
	p.	1 🗖 No	2 ☐ Yes	Hoarseness
	q.	1 🗖 No	2 🗖 Yes	Skin problems
	r.	1 🗖 No	2 🗖 Yes	Muscle sprain or strain
	s.	1 🗖 No	2 ☐ Yes	Back problems
	t.	1 🗖 No	2 ☐ Yes	Hearing problems
	u.	1 🗖 No	2 ☐ Yes	Irritated eyes
	v.	1 🗖 No	2 ☐ Yes	Trouble seeing with one or both eyes even if
				wearing glasses or contacts
	w.	1 🗖 No	2 ☐ Yes	Pain in stomach or abdominal area
	x.	1 🗆 No	2 ☐ Yes	Heat stress or heat stroke
	у.	1 🗖 No	2 ☐ Yes	Psychological condition(s) severe enough to
	•			interfere with daily activities
	z.	1 🗖 No	2 ☐ Yes	Personal problem(s) severe enough to interfere with
				daily activities
	aa.	1 🗖 No	2 ☐ Yes	Other condition or injury
				Please specify:
	bb.	1 🗖 No	2 🗖 Yes	Headache:
		If yes, was yo	our headache: (A	Please check either "no" or "yes" for
		every condition	,	, ,
		1 🗆 No	2 ☐ Yes	Pulsating or throbbing
		1 🗆 No	2 ☐ Yes	One-sided for at least some portion of the headache
				(can be either right or left)
		1 🗆 No	2 ☐ Yes	Severe enough to cause you to stop or decrease your
				activities
		1 🗖 No	2 ☐ Yes	Made worse by physical activity
		Was your hea	dache accompa	anied by:
		1 □ No	2 ☐ Yes	Visual disturbances
		1 🗖 No	2 ☐ Yes	Numbness or tingling
		1 🗖 No	2 ☐ Yes	Sensitivity to noise
		1 🗆 No	2 ☐ Yes	Sensitivity to light
		1 🗖 No	2 ☐ Yes	Nausea or vomiting

14.	healt	During the <b>past 30 days</b> did you receive a doctor's diagnosis of any of these from a health care provider <b>not on this ship</b> ? ( <i>Please check either "no" or "yes" for every condition</i> )							
	a.	1 <b>□</b> No	2 ☐ Yes	Cold or acute n	asonharvn	aitie			
	b.	1 🗆 No	2 ☐ Yes	Sore throat, vira		gius			
	c.	1 🗆 No	2 ☐ Yes	Cough, viral	**				
	d.	ı 🗆 No	2 ☐ Yes	Flu					
15.	more	e days because	of the reasons		•	military	duties for 1 or		
	(Plea			" for every condition					
	a.	1 🗖 No	2 ☐ Yes	Health problem					
	b.	ı 🗆 No	2 🗖 Yes	Emotional prob					
	c.	1 □ No	2 ☐ Yes	Personal proble					
	d.	1 □ No	2 ☐ Yes	Family problem	l				
	e.	1 🗖 No	2 🗖 Yes	Other					
16.				doctor told you? ( <i>Please check</i>			If yes, what was		
	•	•	_	k "Yes," please	) J	3.7	your age in years at <b>first</b>		
			ic. 1) you ence. ìrst diagnosis)	r res, prease	No (1)	Yes (2)	diagnosis?		
a.	Asth	ma				П			
b.	Migr	aine headache	;		0	0			
c.	Aner	nia			0				
d.	Depr	ression			0				
e.	Gone	orrhea			О				
f.	Syph	ilis				٥			
g.	Chla	mydia							
h.	Urina	ary tract infect	ion		0	0			
i.	Kidn	ey infection				D			
j.	Hern	ia (other than	hiatal)			٥			
k.	Anor	exia or bulimi	a		٥				
1.	Hepa	ititis (Circle tv	pe) A B	С					

17.	During the past 30 days did you visit sick call, a provider to obtain care for yourself for any of the apply and fill in the number of visits for each reast □ Acute physical illness	following reasons? (6 son.) No. of visits: ①(	Check as many as  2 3 4 5 or more
18.	Approximately how many months or days ago wayour: (Fill in number of months or days for each item)	Number of months	Number of days (If less than 1 month)
a.	Most recent visit to a medical doctor?		
b.	Most recent visit to another health care profession (Please specify type of provider, e.g., psychologis dentist, nurse-practitioner):	i i	
C.	Most recent visit to a hospital corpsman?		
	MineralAtie		
19.	Have you smoked at least 100 cigarettes in your  1 □ No (Please skip to question 22)  2 □ Yes	entire life? (Check	one box)
20.	On how many of the <b>past 30 days</b> did you smok  0 □ None  1 □ 1-4 days  2 □ 5-9 days  3 □ 10-14 days  4 □ 15-19 days  5 □ 20-24 days  6 □ 25-29 days  7 □ Every day  9 □ Not sure	te cigarettes? (Check	one box)

21.	On average how many cigarettes did you smoke per day during the past 30 days?	
	(Check one box)	
	0 □ None	
	Fewer than 1 cigarette a day, on the average	
	2 □ 1-4 cigarettes	
	3 □ 5-9 cigarettes	
	4 ☐ 10-19 cigarettes	
	5 □ 20-29 cigarettes	
	6 ☐ 30-39 cigarettes	
	7  40-49 cigarettes	
	· · · · · · · · · · · · · · · · · · ·	
	8 ☐ 50 or more cigarettes	
	9 □ Not sure	
22.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour of	or.
	more per day in your immediate work area? (Check one box)	~
	1 No	
	2 ☐ Yes	
	9  Not sure	
	Y Not sure	
23.	During the <b>past 30 days</b> , have you been exposed to tobacco smoke for one (1) hour of more per day in your sleeping area or other non-working area? ( <i>Check one box</i> )	or
	1 □ No	
	2 ☐ Yes	
	9 □ Not sure	
24.	During the past 30 days, have you used any other form of tobacco? (Check all that apply)	
	0 ☐ None	
	1  Cigars	
	2 Pipe	
	3 ☐ Smokeless tobacco (snuff or chew)	
25.	During the past 7 days, on how many days did you have any alcoholic beverages?	
	(Fill in one circle)	
	0 1 2 3 4 5 6 7	
	(If you filled in 0, please skip to question 28)	
26.	On the days you drank any alcoholic beverage during the past 7 days, how many	
20.	drinks did you usually have per day? (Consider a single shot, single mixed drink,	
	glass of wine, or can of beer as 1 drink.) (Fill in one circle)	
	1 2 3 4 5 6 7 8 9 10  If more, please give no.:	
	1) W 3 4 3 6 W 6 9 W 11 more, please give no	

27.	During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  1 2 3 4 5 6 7 8 9 0 T If more, please give no.:
28.	In an average 7 days, on how many days do you engage in exercise or sports that lasts at least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days
29.	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  (a) (a) (b) (c) (d) (d) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e
30.	My current:  a. Weight is pounds.  b. Height is feet and inches.
31.	Calcium intake  a. Have you taken any calcium supplements during the past 30 days? (Check one box)  1  No 2  Yes
	b. If yes, how many milligrams of calcium do you take per day? milligrams.
	<ul> <li>c. On the average, how many glasses do you usually drink per day of: (Fill in one circle)</li> <li>1. Skim milk</li></ul>

32. General Nutrition

32.	General Nutrition				· · · · · · · · · · · · · · · · · · ·
	During the past 7 days, approximately how many times did you: ( <i>Check one box</i> )	Never (1)	1-3 times per week (2)	4-6 times per week (3)	7 or more times per week (4)
a.	Eat high-fat meats or dairy (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream)		0		
b.	Eat fried foods (e.g., french fries, fried chicken, fried eggs)	٥	a	0	0
C.	Eat refined sugar products (e.g., cakes, pies, cookies, candies)		O		
d.	Eat low-fat meats or dairy (e.g., chicken or turkey without skin, low-fat milk, yogurt)	0	o	0	o
e.	Eat "leafy" vegetables (e.g., broccoli, cabbage, greens)		o o		
f.	Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes)	σ	О	0	o
g.	Eat fruits (e.g., apples, oranges, raisins, dried fruit, melons, bananas)			ם	D
h.	Eat high fiber foods (e.g., whole grain breads, cereals, bran)	o		0	0

During the past 30 days, on the average, how many hours of sleep did you get per 24 33. hours? (Fill in one circle)

1 2 3 4 5 6 7 8 9 10 hours

34.	O you or your partner currently use  (Please check all that apply)  1 □ Yes, birth control pills  2 □ Yes, condoms or rubbers  3 □ Yes, spermicidal foam or jelly  4 □ Yes, Depo Provera  5 □ Yes, Norplant  6 □ Yes, intrauterine device (IUD)  7 □ Yes, diaphragm  8 □ Yes, other (please specify)  9 □ No, because of a vasectomy of  10 □ No, I am (or my partner is) state  11 □ No, I am not sexually active  12 □ No, I (we) use no method of be	r tubal ligat erile	tion (tube		event pre	gnancy?
35.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.		П	П	۵	
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	0	o	o	o	o
c.	I would not have sexual intercourse without using birth control.		D	ם	ם	
d.	I would have sexual intercourse without birth control if my partner wanted me to.		0	0	0	o
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.		o	а	ø	
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.		o .	o	٥	o

### OUADITY OF BIEE

36.	How do you feel about your: (Check one box on each line)	Terrible (1)	Unhappy (2)	Mostly dissatisfied (3)	Mixed (4)	Mostly satisfied (5)	Pleased (6)	Delighted (7)
a.	Job?	0	0	0	0			0
b.	Personal life?					O		
c.	Health and physical condition?	o	0			0		0
d.	Life as a whole?		٥			□	J	
e.	Family?	0	٥					0
f.	(If married) Spouse?							
g.	(If you have children) Children?	0	0			0	0	
h.	(If you live in military housing ashore) Military housing ashore?						□	O
i.	(If you live aboard ship) Living conditions aboard ship?	0	0		<b></b>	0	0	0
j.	(If you live in other housing ashore) Other housing ashore?			ם				
k.	Military pay?		0	O	O			٥

			MOOI	)					
37.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day (1)	Two days (2)	Three days	Four days	Five days	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?		o		٥	D	D	٥	
b.	Felt sad?	0			0	o	0	0	0
c.	Had trouble getting to sleep or staying asleep?		O		О	J		O	٥
d.	Felt that everything was an effort?	0		ם	٥	٥	0	a	0
e.	Felt lonely?		o			ם	O	O	П
f.	Felt you couldn't shake the blues?	0	0	٥	О	0	О	O	O
g.	Had trouble keeping your mind on what you were doing?		O	O	O	O	٥	O	O
			VIIRIES	S					
38.	Think about your whole life of past 2 weeks. On the whole,		· [	one .	A little	Modera	ite Qi	uite <b>E</b>	xtreme

much stress do you think is in your life right now? (Please check one box)

			· · · · · · · · · · · · · · · · · · ·	
None	A little	Moderate	Quite	Extreme
at all	bit	amount	a bit	amount
(1)	(2)	(3)	(4)	(5)

39.	Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
a.	Financial matters	O				J	0
b.	My personal health	О			ū		0
c.	Personal or health matters of a family member	O		O			
d.	Being aboard ship	O	0	а	o	О	a
e.	Crowded conditions aboard ship	O	ø			٥	
f.	My personal safety aboard ship	a	0	0		٥	а
g.	Maintaining personal hygiene aboard ship		ø	O	ø		0
h.	My lack of privacy aboard ship	0	0	0	0	٥	a
i.	My inability to get enough exercise aboard ship	ø			ø		0
j.	The lack of recreational activities aboard ship	٥	۵	0	О	0	o
k.	My nutrition, the unavailability of desired foods aboard ship	ø					
1.	The person I work for (my immediate supervisor)	٥	٥	0	0	٥	٥
m.	The people I work with (my peers)	٥		ⅎ	₫		
n.	The people who work for me (those I supervise)	٥	0	٥	0		0
o.	The way things are typically done aboard ship	٥			O		٥

39.	Continued Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
p.	The people with whom I share living space aboard ship			_		_	0
q.	My ability to perform my duties			٥			
r.	My career and chances for promotion	0	0	٥	٥	0	
S.	Being able to stay in the Navy because of downsizing or force reductions						
t.	My relationship with my spouse or boyfriend/girlfriend	٥	0			0	0
11.	Breaking up with my spouse or boyfriend/girlfriend because of being aboard ship						U
v.	My ability to communicate with my family and friends	٥	0	0	٥		0
w.	My use of alcohol	O				0	
x.	My life as a whole	O O	0	0	0		٥
у.	(If you have children) My children because of being aboard ship			O	٥		
Z.	(If you have children) Discipline of children	٥	0	0	0	0	
aa.	(If you have children) Child- care arrangements	۵	0				

40.	During the past 2 weeks, the stresses	Not at all	A little bit	Moderate	Quite	Extreme			
	listed above have affected my:	(1)	(2)	amount (3)	a bit (4)	amount (5)			
	(Please check one box on each line)		0	0	0	0			
a.	Personal life		O	□	J				
b.	Performance in my job		٥		0				
		Not	A little	Moderate	Quite	Extreme			
41.	During the past 2 weeks, how well	at all	bit	amount	a bit	amount			
	have you coped with these stresses?	(1)	(2)	(3)	(4) <b>D</b>	(5)			
	(Please check one box)								
	E/AMTEN AN	VD ERI	ENDS						
42.	How many close friends do you have? (Please fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ or more								
43.	How many relatives do you have that yo (1) (2) (3) (4) (5) (6) or more	u feel clo	ose to? (H	Please fill in	one circ	cle)			
44.	<u> </u>	Altogether, how often do you see these friends and/or relatives each month? (Check							
	one box)  1 □ Almost every day								
	2  Several times a month								
	3 ☐ Not very often maybe once or	twice a n	nonth						
	4 ☐ Seldom a few times a year								
	5 ☐ Almost never								
45.	Are you a member of any clubs or group	s? (Che	ck one bo.	<i>x</i> )					
	1 No								
	2 ☐ Yes								
46.	Do you belong to a church, temple, or or	ther relig	ious orga	nization? (	Check or	ne box)			
	1 No								
	2 ☐ Yes								

47.	Family composition  a. (Unmarried men and women) When you are ashore, do you live with a significant other person in a marital-like relationship? (Check one box)  1  No 2  Yes  h. Are you a parent?							
	b.	Are you a parent?  1 □ No  2 □ Yes						
	c.	How many childre currently live in y	-	- '	r stepchild child	•	the age	of 21
	<ul> <li>d. Are you a single parent? (You are a single parent if you have major responsibility for raising one or more children under 21 years living in your household without a spouse present.)</li> <li>1 □ No</li> <li>2 □ Yes</li> </ul>							
	SOURCES OF FEED							
48.	person helpfu follow be to y	experienced a hal problem, how hal would the hing individuals you? (Check one heach line)	Very unhelpful (1)	Somewhat unhelpful (2)	Neutral (3)	Somewhat helpful (4)	Very helpful (5)	Not applicable (9)
a.	Your i	amily	٥				٥	٥
b.	Your f	friends on board	0	О	0		0	٥
C.	Other Navy	friends in the				П		
d.	Other Navy	friends not in the	0	ø		0	0	
e.	Chapla other o	ins, ministers, or dergy						
f.	Other profes	Navy sionals	0	o				0
g.	Yours	ship's leaders		ŋ	О		Ø	
h.	Other in the	professionals not Navy		a		o o	a	□

#### 

49.	Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK. (Check one box on each line)	None at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Nervousness or shakiness inside	О	О			
b.	Repeated unpleasant thoughts	0	0	0		٥
c.	Faintness or dizziness	ø			٥	Ø
d.	Loss of sexual interest or pleasure					
e.	Feeling critical of others	□			□	٥
f.	The idea that someone else can control your thoughts	o				
ģ	Feeling others are to blame for most of your troubles		0			
h.	Trouble remembering things			0		
i.	Feeling easily annoyed or irritated		О			
j.	Pains in heart or chest		٥	0		0
k.	Feeling afraid in open spaces	☐	J		J	口
1.	Feeling low in energy or slowed down	0		0		٥
m.	Thoughts of ending your life		O		O	П
n.	Feeling that most people cannot be trusted	0	0	0	0	0
o.	Poor appetite	О	ŋ		O	
p.	Crying easily					
q.	Suddenly scared for no reason	O				

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much <b>DISCOMFORT</b> that					
	problem has caused you <b>DURING THE PAST WEEK</b> . (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
r.	Temper outbursts that you could not control	О			0	٥
S.	Feeling lonely even when you are with people	D			٥	O
t.	Feeling blocked in getting things done				O	
u.	Feeling lonely	□			□	O
v.	Feeling blue	0	О	٥	<b>_</b>	O
w.	Worrying too much about things	Ø		J	□	
x.	Feeling no interest in things	0	0	a	0	О
у.	Feeling fearful		□	٥		J
z.	Your feelings are easily hurt	0	0		0	
aa.	Feeling others do not understand you or are unsympathetic	D			O	
bb.	Feeling that people are unfriendly or dislike you	a	a	0		0
cc.	Feeling inferior to others	J		О	П	П
dd.	Nausea or upset stomach	0		0	0	0
ee.	Feeling that you are watched or talked about by others	٥	ø		O	O
ff.	Trouble falling asleep	O		0	o	٥
gg.	Having to check and double-check what you do	O				O
hh.	Difficulty making decisions	0		0		0

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much <b>DISCOMFORT</b> that problem has caused you <b>DURING THE PAST WEEK</b> . (Check one box on each line)	None at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
ii.	Feeling afraid to travel	О	3			
jj.	Trouble getting your breath	a	o			٥
kk.	Hot or cold spells	О	П		□	
11.	Having to avoid certain things, places or activities because they frighten you	o	а	□		٥
mm.	Your mind going blank	O		J		J
nn.	Numbness or tingling in parts of your body	0		□		0
00.	The idea that you should be punished for your sins	O			O	
pp.	Feeling hopeless about the future	o o	0			
qq.	Trouble concentrating				O	
rr.	Feeling weak in parts of your body	a		٥	0	
SS.	Feeling tense or keyed up	O	٥	J	O	
tt.	Thoughts of death or dying	a	o	σ	O	٥
uu.	Having urges to beat, injure or harm someone			٥	o	
vv.	Sleep that is restless or disturbed	0	0	0		o
ww.	Having urges to break or smash things		₫	J	g	□
xx.	Feeling very self-conscious with others					
уу.	Feeling uneasy in crowds		0	J	O	
ZZ.	Never feeling close to another person					

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
aaa.	Spells of terror or panic	0	O		0	
bbb.	Getting into frequent arguments	0	0		0	0
ccc.	Feeling nervous when you are alone	٥	٥		□	D
ddd.	Others not giving you proper credit for your achievements	О	a		a	
eee.	Feeling so restless you couldn't sit still	O	О			□
fff.	Feelings of worthlessness	o	0		0	
ggg.	Feeling that people will take advantage of you if you let them	D	o			
hhh.			a			٥
iii.	Feelings of guilt	g	O		O	□
jjj.	The idea that something is wrong with your mind	٥	О			٥
kkk.	Spending less time with peers and friends	۵	О		□	

# COMMENTS AND SUGGESTIONS Additional comments you would like to add:

Please return to your shipboard coordinator or:

BURDANIK YOLU

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

#### APPENDIX C.5

Follow-up Survey Instrument, Form WC

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form WC, v.1.5, 09 Sep 96

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443: DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809: DSN 553-7809
- I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.
- 8. I fully understand the above statements. By my signature below, I give my voluntary informed consent to participate in this research study as it has been explained to me above.

Signature:		Date: -	- 199		
		Month	Day	Year	
Permanent address	City	State	Zip Code	<del></del>	

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.
TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

- 1. I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator. Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.
- 8. I fully understand the above statements.

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#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

Today	's date:	Mont	h:	Da	ay: Year: 199
What	is your curren	t marital status	? (Check o	ne bo	ox)
1 🛭	Never marrie		•		,
2 🗇	Married				•
	Separated				
	Divorced				
5 🗆	Widowed				
What is your pay grade? (Circle one)					
		Warrant			
<u>E</u>	nlisted	<u>Officer</u>	<u>Off</u>	icer	
E-1	E-6	W-1	O-1	C	)-5
E-2	E-7	W-2	O-2	C	)-6
E-3	E-8	W-3	O-3		
E-4	E-9	W-4	O-4		
E-5					
If you	are Navy enli	isted what is v	our rating	le o	, SN, FN BT, HM, ASM
n you	aro riavy om	istou, what is j	our runng	(0.8.	, 511, 111 51, 1111, 11511
T.C	are Marine ei	nlisted, what is	your M.O	.S. n	umber?
If you					
How r		urrently are in			
How r		urrently are in Nur			
How r Numb	er of men:		nber of wo	men:	:
How r Numb	er of men:	Nu	nber of wo	men:	:
How r Numb	er of men:	Nu	nber of wo	men:	:
How r Numb To wh	er of men:	nmand are you	nber of wo	men:	:
How r Numb To wh	er of men:	nmand are you  nent? (Check of	currently a	men:	:
How r Numb To wh	at ship or con	nmand are you  nent? (Check of	currently a	omen:	: ned?
How r Numb To wh	at ship or con s your departr Administration Air Communicat	nmand are you  ment? (Check of	currently a  one box)	omen: assigr	ned?  Navigation Operations Reactor
How r Numb To wh	at ship or con s your departr Administration	nmand are you  ment? (Check of	one box) 6 7 8	omen:	ned?  Navigation Operations

8. How long have you been assigned to this ship or command? Years: \_\_\_ and months: \_\_\_ \_\_\_

11 🗇

Other (Please specify):

9.	If you are currently aboard ship, what is your ship's current status? (Check one box)								
	1 🗖	In home por	t	3 🗖	In port other than home port				
	2 🗍	At sea			In shipyard				
				9 🗖	~ ~				
10.	Donle	vimont status							
10.	Deployment status  a. How many times have you deployed during the past 12 months?								
	a.	(For purposes of this questionnaire, deployment is defined as:							
		"Ship scheduled at sea for 30 days or more")							
		Tim	•						
	b.	Are vou curi	ently deployed	(30 day	vs or more)?				
	٠.	Are you currently deployed (30 days or more)? (Check one box)							
		1 \( \subseteq \text{No (Please skip to question 11)} \)							
		2  Yes	1 1		,				
	c.	What date di	d you begin thi	is deplo	yment?				
		Mo.:	_ Day:	_Year:	199				
11.	Have		in the Bosnia a	rea duri	ng the past 12 months? (Check one box)				
	1 🗖	No							
	2 🗖	Yes							
12.	Where	e do you live v	when your ship	is in yo	ur home port? (Check one box)				
	1 🗖	Aboard ship		3 🗖	BEQ/BOQ				
	2 🗖	Navy housing	g	9 🗖	Other				
			88 8 Bb A C C C	i	NDITHONS				
			818761818	1110000	ADBIORO				
13.	Have	you had any o	f these health c	ondition	as during the past 30 days whether or not it				
	resulte	ed in a visit to	sick call or a h	ealth ca	re provider?				
	(Pleas		"no" or "yes"						
	a.	1 🗖 No	2 ☐ Yes		on cold symptoms				
	b.	1 🗖 No	2 ☐ Yes	Dizzir	ess				
	C.	1 🗖 No	2 ☐ Yes	Chills					
	d.	1 🗖 No	2 ☐ Yes 2 ☐ Yes	Cough Sore the					
	e. f.	1 □ No 1 □ No	2 ☐ Yes	Fever	uvai				
	g.	1 🗖 No	2 ☐ Yes	Flu					
	g. h.	1 🗖 No	2 ☐ Yes		ea lasting at least 3 days				
	i.	1 🗖 No	2 ☐ Yes		ch problems				

13.	Con	tinued Have	you had any of	these health conditions during the past 30 days
	whetl	<mark>ner or not</mark> it re	sulted in a visit	t to sick call or a health care provider?
	(Plea.	se check either	"no" or "yes".	for every condition)
	j.	1 🗖 <b>N</b> o	2 ☐ Yes	Constipation
	k.	1 🗖 No	2 🗖 Yes	Indigestion
	1.	1 🗖 No	2 ☐ Yes	Nausea or vomiting
	m.	1 🗖 No	2 ☐ Yes	Sinus trouble
	n.	1 🗖 <b>N</b> o	2 ☐ Yes	Hay fever
	0.	1 🗖 No	2 🗖 Yes	Shortness of breath
	p.	1 🗖 <b>N</b> o	2 ☐ Yes	Hoarseness
	q.	1 🗖 No	2 🗖 Yes	Skin problems
	r.	1 🗖 No	2 🗖 Yes	Muscle sprain or strain
	s.	1 🗖 <b>N</b> o	2 🗇 Yes	Back problems
	t.	1 □ No	2 🗖 Yes	Hearing problems
	u.	1 🗖 No	2 🗖 Yes	Irritated eyes
	v.	1 🗖 No	2 ☐ Yes	Trouble seeing with one or both eyes even if
				wearing glasses or contacts
	w.	1 🗖 No	2 🗖 Yes	Pain in stomach or abdominal area
	х.	1 🗖 <b>N</b> o	2 🗖 Yes	Heat stress or heat stroke
	у.	1 🗖 No	2 🗆 Yes	Psychological condition(s) severe enough to
				interfere with daily activities
	z.	1 🗖 No	2 🛘 Yes	Personal problem(s) severe enough to interfere
				with daily activities
	aa.	1 🗖 No	2 🗖 Yes	Other condition or injury
				Please specify:
	bb.	1 🗖 No	2 🗖 Yes	Headache:
		If yes, was y	our headache: (	(Please check either "no" or "yes" for
		every conditi	on)	
		1 🗖 No	2 🗖 Yes	Pulsating or throbbing
		1 🗖 No	2 🗖 Yes	One-sided for at least some portion of the
				headache (can be either right or left)
		1 🗖 No	2 🗖 Yes	Severe enough to cause you to stop or decrease
				your activities
		1 🗖 No	2 🗖 Yes	Made worse by physical activity
		•	adache accompa	•
		1 🗖 No	2 🗖 Yes	Visual disturbances
		1 🗖 No	2 🗆 Yes	Numbness or tingling
		1 🗖 No	2 🗖 Yes	Sensitivity to noise
		1 🗖 No	2 🗖 Yes	Sensitivity to light
		1 🗖 No	2 ☐ Yes	Nausea or vomiting

14.	During the <b>past 30 days</b> did you receive a doctor's diagnosis of any of these from a health care provider <b>not on this ship</b> ? ( <i>Please check either "no" or "yes" for every condition</i> )						
	a.	1 🗖 No	2 ☐ Yes	Cold or acute n		ngitis	
	b.	1 🗆 No	2 ☐ Yes	Sore throat, vir	al		
	C.	1 🗖 No	2 🗆 Yes	Cough, viral			
	d.	1 🗖 No	2 ☐ Yes	Flu			
15. During the <b>past 30 days</b> have you been unable to perform your military duties for more days because of the reasons below?						ry duties for 1 or	
		•		or "yes" for every	condition	)	
	a.	1 🗖 No	2 ☐ Yes	Health problem		•	
	b.	1 🗖 <b>N</b> o	2 🗖 Yes	Emotional prob			
	c.	1 🗖 No	2 🗖 Yes	Personal proble			
	d.	1 🗖 No	2 🗖 Yes	Family problem	1		
	e.	1 🗖 No	2 🗖 Yes	Other			
16.	that y	you had any or pox on each lin	f the following	doctor told you? (Please check 'Yes," please	No (1)	Yes (2)	If yes, what was your age in years at first diagnosis?
a.	Asth	na				J	
b.	Migr	aine headache			O	0	
c.	Anen	nia			O		
d.	Depression						
e.	Gone	orrhea			ø		
f.	Syph	ilis					
g.	Chlamydia				O		
h.	Urinary tract infection						
i.	Kidney infection						
j.	Hernia (other than hiatal)				0		
k.	Anorexia or bulimia						
1.	Hepa	titis (Circle ty	pe) A B	C			

17.	During the past 30 days did you visit sick call, a me provider to obtain care for yourself for any of the feas apply and fill in the number of visits for each reaction.  Acute physical illness, not OB-GYN  Chronic physical illness, not OB-GYN  Acute injury  Old or chronic injury  Health maintenance or preventive screening  Psychological or emotional condition  Pregnancy test or to pick up test kit  OB-GYN care  Other	ollowing reasons?  ason.)  No. of visits: ①②  No. of visits: ①②	(Check as many )(3)(4)(5) or more
18.	Approximately how many months or days ago was your: (Fill in number of months or days for each item)	Number of months	Number of days (If less than 1 month)
a.	Most recent visit to a medical doctor?		
b.	Most recent visit to another health care professional? (Please specify type of provider, e.g., psychologist, dentist, nurse-practitioner):		
c.	Most recent visit to a hospital corpsman?		
	DIEEXYYVEE		
19.	Have you smoked at least 100 cigarettes in your enting 1 ☐ No (Please skip to question 22) 2 ☐ Yes	re life? (Check one	e box)
20.	On how many of the <b>past 30 days</b> did you smoke cig  0 □ None  1 □ 1-4 days  2 □ 5-9 days  3 □ 10-14 days  4 □ 15-19 days  5 □ 20-24 days  6 □ 25-29 days  7 □ Every day  9 □ Not sure	arettes? (Check one	e box)

21.	On average how many cigarettes did you smoke per day during the <b>past 30 days</b> ? (Check one box)				
	0 🗖	None			
	10	Fewer than 1 cigarette a day, on the average			
	2 🗇	1-4 cigarettes			
		· ·			
	3 🗍	5-9 cigarettes			
	4 🗍	10-19 cigarettes			
	5 🗍	20-29 cigarettes			
	6 🗍	30-39 cigarettes			
	7 🗖	40-49 cigarettes			
	8 🗇	50 or more cigarettes			
	9 🗖	Not sure			
22.	During the <b>past 30 days</b> , have you been exposed to tobacco smoke for one (1) hour or more per day in your immediate work area? ( <i>Check one box</i> )				
	1 🗇	No			
	2 🗇	Yes			
	9 🗖	Not sure			
00	ъ.	420 1			
23.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour or				
	_	per day in your sleeping area or other non-working area? (Check one box)			
	1 🗇	No No			
	2 🗖	Yes Not our			
	9 🗖	Not sure			
24.	During the past 30 days, have you used any other form of tobacco? (Check all that apply)				
	0 🗇	None			
	1 🗇	Cigars			
	2 🗖	Pipe			
	3 🗖	Smokeless tobacco (snuff or chew)			
25.	During the past 7 days, on how many days did you have any alcoholic beverages? (Fill in one circle)				
	0 1234567				
		filled in 0, please skip to question 28)			
26.	On the days you drank any alcoholic beverage during the <b>past 7 days</b> , how many drinks did you usually have <b>per day</b> ? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) ( <i>Fill in one circle</i> )				
	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ○ If more, please give no.:				

27.	day? drink	ng the <b>past 7 days</b> , what was the largest number of alcoholic drinks you had in 1 (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1.) (Fill in one circle)  1 3 4 5 6 7 8 9 10					
28.	at lea heavi	In an average 7 days, on how many days do you engage in exercise or sports that lasts at least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  (1) (2) (3) (4) (5) (6) (7) days					
29.	make witho	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days					
30.		My current:					
	a.	Weight is pounds.  Height is feet and inches.					
	b.	Height is feet and inches.					
31.	1 🗖 2 🗖	Gained weight, pounds Lost weight, pounds Stayed the same					
32.		On the average, during a usual week in the past 12 months, on approximately how many days did you: (Fill in one circle on each line)					
	a.	Eat a lot more food than you needed during a 24-hour period?  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week					
	b.	Binge by eating four or more ounces of junk food during a 24-hour period?  (a) (a) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d					
	c.	Take a water pill (diuretic) to maintain or lose weight?  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week					
	d.	Take a laxative to maintain or lose weight?  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week					
	e.	Make yourself vomit to maintain or lose weight?  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week					

33.	(Please check all that apply)  1 Yes, birth control pills  2 Yes, condoms or rubbers  3 Yes, spermicidal foam or jelly  4 Yes, Depo Provera  5 Yes, Norplant  6 Yes, intrauterine device (IUD)  7 Yes, diaphragm  8 Yes, other (please specify)  9 No, because of a vasectomy or tubal ligation (tubes tied)  10 No, I am (or my partner is) sterile  11 No, I am not sexually active  12 No, I (we) use no method of birth control						
34.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)	
a.	The whole idea of birth control is embarrassing to me.	O					
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	٥		_	0	0	
c.	I would not have sexual intercourse without using birth control.	O			J	O	
d.	I would have sexual intercourse without birth control if my partner wanted me to.	0	0	o	o	0	
e.	Sometimes when a birth control method is not available. I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.			П	0	O	
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.	٥	٥	o o	o		

# QUALITY OF LIFE

35.	How do you feel about your: (Check one box on each line)	Terrible (1)	Unhappy (2)	Mostly dissatisfied (3)	Mixed (4)	Mostly satisfied (5)	Pleased (6)	Delighted (7)
a.	Job?	o	0				0	O
b.	Personal life?	O	П	٥	ø	□	□	0
c.	Health and physical condition?	0	o	0		o	٥	٥
d.	Life as a whole?	D	J					ø
e.	Family?		0				٥	
f.	(If married) Spouse?	J	O					
g.	(If you have children) Children?	0	٥	a		٥	0	o
h.	(If you live in military housing ashore) Military housing ashore?			П	٥			0
i.	(If you live aboard ship) Living conditions aboard ship?	0 .	0	σ	_	0	0	σ
j.	(If you live in other housing ashore) Other housing ashore?					П		
k.	Military pay?	0	٥	0	0			O

	****	93300	222	888
	~≈	w.	×	~~
5 L W/	888	, 7 SS		88R '
2 A 7 S	28	1,88		900 A

36.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day (1)	Two days (2)	Three days	Four days (4)	Five days (5)	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?						ם	ם	
b.	Felt sad?		D	0		ם			
C.	Had trouble getting to sleep or staying asleep?								
d.	Felt that everything was an effort?								
e.	Felt lonely?		D	O	0			D	0
f.	Felt you couldn't shake the blues?				٥		0	0	
g.	Had trouble keeping your mind on what you were doing?							٥	

## STRESS

37. Think about your whole life over the past 2 weeks. On the whole, how much stress do you think is in your life right now? (*Please check one box*)

None	A little	Moderate	Quite	Extreme
at all	bit	amount	a bit	amount
(1)	(2)	(3)	(4)	(5)
J				

38.	Of the stress that you experience, how much comes from problems or concerns	Not	A little	Moderate	Quite	Extreme	Not
	with: (Please check one box on each line)	at all (1)	bit (2)	amount (3)	a bit (4)	amount (5)	applicable (9)
a.	Financial matters	O			П	O	
b.	My personal health						
¢.	Personal or health matters of a family member	٥	ø			g	O
d.	Being aboard ship	0	0		0		0
e.	Crowded conditions aboard ship	O	ø		ם	O	D
f.	My personal safety aboard ship	0	0			σ	a
g.	Maintaining personal hygiene aboard ship	۵	ø			٥	D
h.	My lack of privacy aboard ship		0			٥	ם
i.	My inability to get enough exercise aboard ship	O			О	O	D
j.	The lack of recreational activities aboard ship					o o	0
k.	My nutrition, the unavailability of desired foods aboard ship			О	O	П	О
1.	The person I work for (my immediate supervisor)		٥		0	0	0
m.	The people I work with (my peers)	ם		D	D	J	
n.	The people who work for me (those I supervise)						٥
О.	The way things are typically done aboard ship					J	۵

38.	Continued Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
p.	The people with whom I share living space aboard ship		0	0	0	0	o o
q.	My ability to perform my duties				O		
r.	My career and chances for promotion	0	0	0	0		o
S.	Being able to stay in the Navy because of downsizing or force reductions					О	
t.	My relationship with my spouse or boyfriend/girlfriend	٥	o	٥	9	٥	0
u.	Breaking up with my spouse or boyfriend/girlfriend because of being aboard ship	Ø					
v.	My ability to communicate with my family and friends	О	O	0	O	0	o
w.	My use of alcohol	O	O		0		
х.	My life as a whole	σ		o		٥	
у	(If you have children) My children because of being aboard ship	٥		٥	J		٥
z.	(If you have children) Discipline of children	٥	a	O	0	٥	0
aa.	(If you have children) Child- care arrangements	٥	D	O	O	O	D

39.	During the <b>past 2 weeks</b> , the stresses listed above have affected my: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)		
a.	Personal life			ø	П	O		
b.	Performance in my job	0	0	0		_		
		g-min-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1						
40.	During the past 2 weeks, how well have you coped with these stresses? (Please check one box)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)		
	FAMILY A	1/48 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2/48//88					
	9-1/2/1990							
41.	How many close friends do you have? (Please fill in one circle)  (a) (a) (b) (c) (c) (c) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e							
42.	How many relatives do you have that y (a) (a) (a) (b) (c) (d) (e) (o) or more	ou feel cle	ose to? (	Please fill in	ı one cir	cle)		
43.	Altogether, how often do you see these friends and/or relatives? (Check one box)  1							
44.	Are you a member of any clubs or group 1  No Yes	ups? (Che	ck one bo	<i>x</i> )				
45.	Do you belong to a church, temple, or other religious organization? (Check one box)  1 □ No  2 □ Yes							

40.	ramii a.	significant other person in a marital-like relationship? (Check one box)  1  No 2  Yes									
	b.	Are you a parent?  1  No 2  Yes	•								
	c. How many children (natural, adopted, or stepchildren) under the age of 21 currently live in your household? children										
	<ul> <li>d. Are you a single parent? (You are a single parent if you have major responsibility for raising one or more children under 21 years living in your household without a spouse present.)</li> <li>1 □ No</li> <li>2 □ Yes</li> </ul>										
			SOUR	eso)es	502						
47.	person helpfu follow be to y	experienced a nal problem, how I would the ing individuals you? (Check one in each line)	Very unhelpful (1)	Somewhat unhelpful (2)	Neutral (3)	Somewhat helpful (4)	Very helpful (5)	Not applicable (9)			
a.	Your i	family	D	O	D	٥	O	D			
b.	Your f	friends on board	o	o	О		a				
c.	Other Navy	friends in the	Ð	J	Ð	ם		D			
d.	Other Navy	friends not in the	a	a	a	0	٥	o o			
e.	Chapla other o	ains, ministers, or elergy	ם	J	D	ם	П	D			
f.	Other profes	Navy sionals	a	o	٥	_					
g.	Yours	ship's leaders	O		O			П			
h.	Other in the	professionals not	O								

# 

48.	Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK. (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Nervousness or shakiness inside	О	D	O	П	
b.	Repeated unpleasant thoughts	٥	٥	٥	٥	٥
c.	Faintness or dizziness	O	О	ŋ	٥	
d.	Loss of sexual interest or pleasure	o		٥	0	0
e.	Feeling critical of others	ø	Ð	П	O	
f.	The idea that someone else can control your thoughts	٥	0			٥
g.	Feeling others are to blame for most of your troubles			٥		D
h.	Trouble remembering things	o	0	0	0	0
i.	Feeling easily annoyed or irritated	O	0	П		
j.	Pains in heart or chest		0	. 0		
k.	Feeling afraid in open spaces	a	О	ø	0	О
1.	Feeling low in energy or slowed down	0		0	0	0
m.	Thoughts of ending your life	O	О	П		
n.	Feeling that most people cannot be trusted	o	o	0	0	
0.	Poor appetite	O	O	D	O	O
p.	Crying easily	0	0		0	0
q.	Suddenly scared for no reason	D	ø		J	Ø

48.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
r.	Temper outbursts that you could not control	٥			0	٥
S.	Feeling lonely even when you are with people			O	О	O
t.	Feeling blocked in getting things done	0	0	0		
u.	Feeling lonely	□	O	J		
V.	Feeling blue	a	0	0		σ
w.	Worrying too much about things	О			О	П
x.	Feeling no interest in things	0	٥	0	٥	0
у.	Feeling fearful	O	ø	Ø	O	O
z.	Your feelings are easily hurt		a	o	0	О
aa.	Feeling others do not understand you or are unsympathetic	٥	□	O	ø	O
bb.	Feeling that people are unfriendly or dislike you	٥	0	0	0	0
cc.	Feeling inferior to others		O		O	Ð
dd.	Nausea or upset stomach	0		0	0	
ee.	Feeling that you are watched or talked about by others	O				
ff.	Trouble falling asleep		0	σ		
gg.	Having to check and double-check what you do	J	٥	IJ		
hh.	Difficulty making decisions	٥				a

48.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
ii.	Feeling afraid to travel		О	IJ		
jj.	Trouble getting your breath	σ	0		0	
kk.	Hot or cold spells	ø			ø	٥
11.	Having to avoid certain things, places or activities because they frighten you	o		o	_	
mm.	Your mind going blank	0	О	О		
nn.	Numbness or tingling in parts of your body	٥	□	٥	a	o
00.	The idea that you should be punished for your sins	J		J	O	O
pp.	Feeling hopeless about the future	0	0	O	0	О
qq.	Trouble concentrating	0	0	П	О	
rr.	Feeling weak in parts of your body	0	٥	0	σ	٥
SS.	Feeling tense or keyed up	а	О	П	O	О
tt.	Thoughts of death or dying	0		o	o	O
uu.	Having urges to beat, injure or harm someone	J	D	J	o	o
vv.	Sleep that is restless or disturbed		0	0	0	
ww.	Having urges to break or smash things	О	О	J	О	О
xx.	Feeling very self-conscious with others	0	0	О	0	o
yy.	Feeling uneasy in crowds	o	g	D	ø	
zz.	Never feeling close to another person			0		0

48.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
aaa.	Spells of terror or panic	O		П	П	
bbb.	Getting into frequent arguments	o	_		a	٥
ccc.	Feeling nervous when you are alone	П				
ddd.	Others not giving you proper credit for your achievements			0	۵	o
eee.	Feeling so restless you couldn't sit still				O	
fff.	Feelings of worthlessness	0			a	٥
ggg.	Feeling that people will take advantage of you if you let them	O				
hhh.	Thoughts and images of a frightening nature				0	0
iii.	Feelings of guilt		9			
jjj.	The idea that something is wrong with your mind		o	٥	0	0
kkk.	Spending less time with peers and friends	Ø	O		О	

# WOMEN'S SECTION

49.	Mens	Menstrual periods								
	a.	Durin	ng the past 12 months have you had regular me	enstrua	ıl perio	ds? (Check				
		one b								
		1 🗇	No (Please explain):							
		2	,							
	b.	If you missed one or more periods during the past 12 months, please check one box below:								
		1 🗖	I missed my period approximately time(s) during the past 12 months.							
		0 🗆 9 🗖	I had no periods at all during the past 12 months.							
50.	(Chec	During the past 90 days have you taken birth control pills to regulate your periods?  (Check one box)  1 \( \subseteq \text{No}  2 \subseteq \text{Yes} \)								
51.	1 🗖									
	Yes, hormone pills.  Yes, hormone creams or other hormone preparations.									
52.	Has a follow		ever told you that you had any of the			If yes, what was your age in years at				
	•		k one box on each line. If you check "Yes," your age at first diagnosis.)	No (1)	Yes (2)	first diagnosis?				
a.	Abno	rmal Pa	p smear (test for cervical cancer)	٥	٥					
b.		_	diagnosed as benign breast cyst or fibrocystic ase specify):	٥	٥					
C.	Benig	n breas	t lump, exact diagnosis unknown	٥	O					
d.	Breas	st cancer	r							

# PREGNANCY

53.	How 0 □	many times have you been pregnant? (Check one box) Never (Please skip to question 57)
	1 🗖	I have been pregnant times.
54.	Are y 1	No Yes Not sure
55.	Recei a.	Have you been pregnant during the <b>past 12 months</b> ? (Check one box)  1  No (Skip to question 57)  2  Yes
	b.	How many times have you been pregnant during the <b>past 12 months</b> ? times.
	c.	Were you serving aboard this ship when you were informed you were pregnant?  1 □ No (Skip to question 57)  2 □ Yes
	d.	How many weeks did you serve aboard this ship after your command was notified of your pregnancy?weeks.
	e.	Were you transferred ashore due to pregnancy?  1 □ No (Skip to question 57)  2 □ Yes
	f.	How many weeks pregnant were you when transferred off this ship? weeks

Please provide the following information in chronological order for the **past 12** months. For multiple outcomes, make each a separate entry (e.g., two entries for twins). Indicate only one "outcome" per pregnancy. If you are uncertain of a detail, provide your best estimate.

Pregnancy	Outcome	What was the approximate date of this outcome?	Were you in the Navy at the time?		was your duty type at the time: at Out- come	Was this pregnancy planned?
a. Most recent	☐ 1 Live Birth ☐ 2 Stillbirth ☐ 3 Miscarriage/ spontaneous abortion ☐ 4 Ectopic pregnancy ☐ 5 Elective induced abortion	Year [9 Month	□1 No □2 Yes	□1 □2 □3 □4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes
b. Prior pregnancy (or twin)	☐ 1 Live Birth ☐ 2 Stillbirth ☐ 3 Miscarriage/ spontaneous abortion ☐ 4 Ectopic pregnancy ☐ 5 Elective induced abortion	Year 19 Month 	□ 1 No □ 2 Yes	1 2 3 4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes

57.	What is your best estimate of the likelihood that you will become pregnant in the next
	12 months?
	(Fill in a number between 0 and 100, with 0 representing no chance that the event will
	occur, and 100 representing that the event definitely will occur): percent

	COMMENTS AND SUGG	ESTIONS
Additional comments you	u would like to add:	
	A 2 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -	
Personal de la companya de la compan		

Please return to your shipboard coordinator or:

THANK YOU

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

#### APPENDIX C.6

Follow-up Survey Instrument, Form MC

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form MC, v.1.5, 09 Sep 96

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving abourd. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809
- 7 I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center. San Diego, CA 92186-5122.

in this research study as it has been explained to me above.	ve my volumary informed	i consent to	) рагистрате
Signature:	Date:		199
	Month	Day	Year

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.

City

Zip Code

State

Permanent address

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- 7. I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center. San Diego, CA 92186-5122.
- 8. I fully understand the above statements.

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

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Today	's date:	Mon	th:	Day:		Year: 199	
What	is your curren	t marital status	s? (Check on	e box)			
1 🗆	Never marrie		`	,			
2 🗇	Married						
3 🗆	Separated						
	Divorced						
5 🗖	Widowed						
What	is your pay gr	ade? (Circle d	one)				
		Warrant					
E	<u>Enlisted</u>	<u>Officer</u>	<u>Offic</u>	<u>cer</u>			
E-1	E-6	W-1	O-1	O-5			
E-2	E-7	W-2	O-2	0-6			
E-3	E-8	W-3	O-3				
		XX7 A	O-4				
E-4	E-9	W-4	0-4				
E-5							
E-5 If you	are Navy enli	sted, what is y	your rating (e				
E-5 If you If you How r	are Navy enli are Marine en		your rating (or some sour M.O.S.)  your work sour work so work sour work so	S. num group?	ber?		
E-5 If you If you How r	are Navy enli are Marine en nany people co er of men:	sted, what is y ilisted, what is urrently are in	your rating (or some some sour M.O.S.)  your work and the source of work sour work so the source of work source	S. num group? nen:	ber?		
E-5 If you If you How r	are Navy enli are Marine en nany people co er of men:	sted, what is ynlisted, what is urrently are in Nu	your rating (or some some sour M.O.S.)  your work and the source of work sour work so the source of work source	S. num group? nen:	ber?		·
E-5 If you If you How r	are Navy enli are Marine en nany people co er of men:	sted, what is ynlisted, what is urrently are in Nu	your rating (or some some sour M.O.S.)  your work and the source of work sour work so the source of work source	S. num group? nen:	ber?		
E-5  If you  If you  How r  Number  To wh	are Navy enli are Marine en many people co er of men: at ship or con	sted, what is ynlisted, what is urrently are in Number 1990 Number	your rating (es your M.O.S) your work gone of wond currently as	group? nen: signed	ber? 		
E-5 If you If you How r Number To wh	are Navy enli are Marine en many people comer of men: mat ship or comets your departners.	sted, what is ynlisted, what is urrently are in Number 1990 Number	your rating (or your M.O.S. your work gonder of wond currently as	S. num group? nen: signed	ber?		
E-5  If you  If you  How r  Number  To wh  What if 1  2  1	are Navy enling are Marine en many people conter of men:  at ship or content is your departed Administration in the content of	sted, what is ynlisted, what is urrently are in Number 1990.  The standard	your rating (6 s your M.O.S your work § mber of won currently as	group? nen: signed	ber??		
E-5  If you  If you  How r  Number  To wh  What in  1 □ 2 □ 3 □	are Navy enli are Marine en many people comer of men: at ship or comes is your departed Administration Air Communication	sted, what is ynlisted, what is urrently are in Number 1990.  The standard	your rating (6) your M.O.S. your work gamber of wond currently as	signed  Note that the state of	ber??  avigation perations eactor		
E-5  If you  If you  How r  Number  To wh  What if 1	are Navy enling are Marine en many people conter of men:  at ship or content is your departed Administration Air  Communication Deck	sted, what is ynlisted, what is urrently are in Number 1990.  The standard	your rating (6 s your M.O.S your work g mber of won currently as	signed  No  Re  Re  Re  Re  Re  Re  Re  Re  Re  R	ber??  avigation perations eactor epair		
E-5  If you  If you  How r  Number  To wh  What in  1 □ 2 □ 3 □	are Navy enli are Marine en many people comer of men: at ship or comes is your departed Administration Air Communication	sted, what is ynlisted, what is urrently are in Number 1990.  The standard	your rating (6) your M.O.S. your work gamber of wond currently as	group? nen: signed  Na O Re C Re C S S C	avigation perations eactor epair apply		

9.	-	you are currently aboard ship, what is your ship's current status? heck one box)						
	1 🗆	In home por	<del>t</del>	3 🗖	In port other than home port			
	2 🗇	At sea	·	4 🗖	•			
	2 🚅	7 Kt 5Cd		9 🗇	Other (Please specify):			
				<i>)</i>	Offici (1 tease specify).			
10.	-	yment status						
	a.	•	•		d during the past 12 months?			
					, deployment is defined as:			
		Ship sched	luled at sea for nes	so aays	(or more)			
	b.	Are you cur	rently deployed	(30 day	ys or more)?			
		(Check one b	pox)					
		1 🗖 No (1	Please skip to q	uestion	11)			
		2 🗇 Yes						
	c.	What date did you begin this deployment?						
		Mo.: Day: Year: 199						
11.		• •	in the Bosnia a	rea duri	ng the past 12 months? (Check one box)			
	1 🗖 2 🗖	No Yes						
	2 🕒	168						
12.	Where	-	when your ship	is in yo	our home port? (Check one box)			
	1 🗖	Aboard ship		3 🗖	BEQ/BOQ			
	2 🗖	Navy housin	g	9 🗖	Other			
			BIBATIN	#1 (C (C)	NDITIONS			
13.	Have	you had any o	f these health c	onditior	as during the past 30 days whether or not it			
	resulted in a visit to sick call or a health care provider?							
			"no" or "yes"					
	a.	1 🗖 No	2 ☐ Yes		non cold symptoms			
	b.	1 🗖 No	2 ☐ Yes	Dizzir				
	C.	1 D No	2 ☐ Yes	Chills				
	d.	1 🖸 No	2 ☐ Yes	Cough				
	e.	1 🗖 No	2 ☐ Yes	Sore t	nroat			
	f.	1 D No	2 ☐ Yes	Fever				
	g. h	1 🗖 No	2 ☐ Yes	Flu	on lasting at locat 2 days			
	h. i.	1 🗖 No	2 ☐ Yes 2 ☐ Yes		nea lasting at least 3 days			
	1.	1 🗖 No	2 LJ 1 CS	SiOHIa	ch problems			

13.	Con	tinued Have	you had any of	these health conditions during the past 30 days			
	whether or not it resulted in a visit to sick call or a health care provider?						
	(Pleas	se check either	"no" or "yes"	for every condition)			
	j.	1 🗖 No	2 🗖 Yes	Constipation			
	k.	1 □ No	2 🗖 Yes	Indigestion			
	1.	1 □ No	2 ☐ Yes	Nausea or vomiting			
	m.	1 □ No	2 🗖 Yes	Sinus trouble			
	n.	1 □ No	2 🗖 Yes	Hay fever			
	0.	1 □ No	2 🗖 Yes	Shortness of breath			
	p.	1 □ No	2 🗖 Yes	Hoarseness			
	q.	1 🗖 No	2 🗖 Yes	Skin problems			
	r.	1 🗖 No	2 ☐ Yes	Muscle sprain or strain			
	s.	1 🗖 No	2 🗖 Yes	Back problems			
	t.	1 🗖 No	2 🗖 Yes	Hearing problems			
	u.	1 🗖 <b>N</b> o	2 ☐ Yes	Irritated eyes			
	v.	1 🗖 No	2 🗖 Yes	Trouble seeing with one or both eyes even if			
				wearing glasses or contacts			
	w.	1 🗖 No	2 🗖 Yes	Pain in stomach or abdominal area			
	х.	1 🗖 No	2 🗖 Yes	Heat stress or heat stroke			
	у.	1 🗖 No	2 🗖 Yes	Psychological condition(s) severe enough to			
	_			interfere with daily activities			
	Z.	1 🗖 No	2 ☐ Yes	Personal problem(s) severe enough to interfere			
				with daily activities			
	aa.	1 🗖 No	2 🗖 Yes	Other condition or injury			
				Please specify:			
	bb.	1 🗖 No	2 🗖 Yes	Headache:			
		If yes, was your headache: (Please check either "no" or "yes" for					
		every conditi	ion)				
		1 🗖 No	2 🗖 Yes	Pulsating or throbbing			
		1 🗖 No	2 ☐ Yes	One-sided for at least some portion of the			
				headache (can be either right or left)			
		1 🗖 No	2 🗖 Yes	Severe enough to cause you to stop or decrease			
				your activities			
		1 🗖 No	2 🗖 Yes	Made worse by physical activity			
		<u>-</u>	eadache accomp	<del>-</del>			
		1 🗖 No	2 🗖 Yes	Visual disturbances			
		1 🗖 No	2 🗖 Yes	Numbness or tingling			
		1 🗖 No	2 🗖 Yes	Sensitivity to noise			
		1 🗖 No	2 🗖 Yes	Sensitivity to light			
		1 🗖 No	2 🗖 Yes	Nausea or vomiting			

14.	healt	-		receive a doctor's ship? (Please chec	_	•	
	a.	1 □ No	2 ☐ Yes	Cold or acute n	asopharvi	ngitis	
	<b>b</b> .	1 🗖 No	2 ☐ Yes	Sore throat, vir	~ *		
	c.	1 □ No	2 ☐ Yes	Cough, viral			
	d.	1 🗆 No	2 ☐ Yes	Flu			
15.		e days because	of the reasons		·		ry duties for 1 or
		•		or "yes" for every		)	
	a.	1 □ No	2 ☐ Yes	Health problem			
	b.	1 🗖 No	2 ☐ Yes	Emotional prob			
	C.	1 □ No	2 ☐ Yes	Personal proble			
	d.	1 🗖 No	2 ☐ Yes 2 ☐ Yes	Family problem Other	l		
	e.	1 □ No	2D Tes	Other			
16.				a doctor told you? (Please check			If yes, what was your age in
	one l	box on each lir	ne. If you chec	ck "Yes," please	No	Yes	years at first
			irst diagnosis)		(1)	(2)	diagnosis?
a.	Asth	ma			O	O	
b.	Migr	aine headache			0	0	
C.	Aner	nia					
d.	Depr	ession			0	0	
e.	Gone	orrhea					
f.	Syph	ilis					
g.	Chla	mydia			O	O	
h.	Urin	ary tract infect	tion	:	0		
i.	Kidn	ey infection				ם	-
j.	Hern	ia (other than	hiatal)		a		
k.	Anor	exia or bulimi	a		O		
1.	Hepa	ititis (Circle ty	rpe) A B	С			

17.	During the past 30 days did you visit sick call provider to obtain care for yourself for any of as apply and fill in the number of visits for each 1 ☐ Acute physical illness	the followin th reason.) No. of No. of No. of No. of No. of No. of	yisits: 12 visits: 12 visits: 12 visits: 12 visits: 12 visits: 12 visits: 12	(Check as many )(3)(4)(5) or more
18.	Approximately how many months or days ago your: (Fill in number of months or days for each item	N	umber of months	Number of days (If less than 1 month)
a.	Most recent visit to a medical doctor?	-		
b. c	Most recent visit to another health care professional? (Please specify type of provider, psychologist, dentist, nurse-practitioner):  Most recent visit to a hospital corpsman?	e.g.,		
	BIRESTYB	3		
19.	Have you smoked at least 100 cigarettes in your  1 □ No (Please skip to question 22)  2 □ Yes	entire life?	(Check one	e box)
20.	On how many of the <b>past 30 days</b> did you smoke  0 □ None  1 □ 1-4 days  2 □ 5-9 days  3 □ 10-14 days  4 □ 15-19 days  5 □ 20-24 days  6 □ 25-29 days  7 □ Every day  9 □ Not sure	ce cigarettes	? (Check one	e box)

21.	On a	verage how many cigarettes did you smoke per day during the past 30 days?
	(Che	ck one box)
	0 🗖	None
	1 🗆	Fewer than 1 cigarette a day, on the average
	2 🗖	1-4 cigarettes
	3 🗖	5-9 cigarettes
	4 🗇	10-19 cigarettes
	5 🗖	20-29 cigarettes
	6 🗖	30-39 cigarettes
	7 🗖	40-49 cigarettes
	8 🗖	50 or more cigarettes
	9 🗖	Not sure
22.	Durir	ng the past 30 days, have you been exposed to tobacco smoke for one (1) hour or
	more	per day in your immediate work area? (Check one box)
	1 🗖	No
	2 🗖	Yes
	9 🗖	Not sure
23.	Durin	ng the past 30 days, have you been exposed to tobacco smoke for one (1) hour or
	more	per day in your sleeping area or other non-working area? (Check one box)
	1 🗇	No
	2 🗖	Yes
	9 🗖	Not sure
24.		ig the past 30 days, have you used any other form of tobacco? (Check all that
	apply	None
	1 🗖	Cigars
	2 🗇	Pipe ·
	3 🗖	Smokeless tobacco (snuff or chew)
25.	Durir	ng the past 7 days, on how many days did you have any alcoholic beverages?
	(Fill i	in one circle)
	0 (	234567
	(If yo	u filled in 0, please skip to question 28)
26.		e days you drank any alcoholic beverage during the past 7 days, how many
		s did you usually have <b>per day</b> ? (Consider a single shot, single mixed drink, of wine, or can of beer as 1 drink.) ( <i>Fill in one circle</i> )
	_	) ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ○ If more, please give no.:

27.	day? drink	g the past 7 days, what was the largest number of alcoholic drinks you had in 1 (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1.) (Fill in one circle)  (3 4 5 6 7 8 9 10 The more, please give no.:
28.	at lea heavi	average 7 days, on how many days do you engage in exercise or sports that lasts st 20 minutes without stopping, and that is hard enough to make you breathe er and your heart beat faster?: (Fill in one circle)  2 3 4 5 6 7 days
29.	make witho	average 7 days, on how many days do you engage in work that is hard enough to you breathe heavier and your heart beat faster that lasts at least 20 minutes ut stopping?: (Fill in one circle)  2 3 4 5 6 7 days
30.	Му с	urrent:
	a.	Weight is pounds.  Height is feet and inches.
	b.	Height is feet and inches.
31.	1 🗆 2 🗖	Gained weight, pounds  Lost weight, pounds  Stayed the same
32.		e average, during a usual week in the <b>past 12 months</b> , on approximately how days did you: (Fill in one circle on each line) Eat a lot more food than you needed during a 24-hour period?  ① ① ② ③ ④ ⑤ ⑦ days per week
	b.	Binge by eating four or more ounces of junk food during a 24-hour period?  (a) (a) (b) (c) (d) (d) (d) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e
	c.	Take a water pill (diuretic) to maintain or lose weight?  (1) (1) (2) (3) (4) (5) (6) (7) days per week
	d.	Take a laxative to maintain or lose weight?  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week
	e.	Make yourself vomit to maintain or lose weight?  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week

33.	Do you or your partner currently use ar (Please check all that apply)  1 Yes, birth control pills  2 Yes, condoms or rubbers  3 Yes, spermicidal foam or jelly  4 Yes, Depo Provera  5 Yes, Norplant  6 Yes, intrauterine device (IUD)  7 Yes, diaphragm  8 Yes, other (please specify)  9 No, because of a vasectomy or  10 No, I am (or my partner is) ste  11 No, I am not sexually active  12 No, I (we) use no method of bir	tubal ligat			ent pregna	incy?
34.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.	0				
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	0	0	0	0	0
C.	I would not have sexual intercourse without using birth control.					Ø
d.	I would have sexual intercourse without birth control if my partner wanted me to.	0			0	0
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.			0		O
f.	If I needed to go to a doctor or clinic for birth control information, I	_	٥	О		

# OUALITY OF BIEF

35.	How do you feel about your: (Check one box on each line)	Terrible	Unhappy (2)	Mostly dissatisfied (3)	Mixed (4)	Mostly satisfied (5)	Pleased (6)	Delighted (7)
a.	Job?	a			0	0	a	0
b.	Personal life?	D	О		D	O	O	П
c.	Health and physical condition?	0	a		0	О	٥	a
d.	Life as a whole?	ŋ		O	П	П		
e.	Family?	0	О	0	О		0	O
f.	(If married) Spouse?	D	D	J	٥	ø	O	J
g.	(If you have children) Children?	0	o	0		0	o	O
h.	(If you live in military housing ashore) Military housing ashore?	o					O	O
i.	(If you live aboard ship) Living conditions aboard ship?	0	٥	0	o	o	0	0
j.	(If you live in other housing ashore) Other housing ashore?	O	O	O	O	o	J	O
k.	Military pay?		0		O	0		

M(0)0)	

36.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day (1)	Two days (2)	Three days	Four days (4)	Five days (5)	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?		۵	D	O	O	o	O	٥
b.	Felt sad?	0	o		0	J			0
c.	Had trouble getting to sleep or staying asleep?		J	П	П	О	О	D	
d.	Felt that everything was an effort?	۵	О	o	0		٥	o	0
e.	Felt lonely?		ø	ø	O	O		0	a
f.	Felt you couldn't shake the blues?	o		0	٥		0	0	0
g.	Had trouble keeping your mind on what you were doing?	٥	O				٥	ם	О

## SHRESS

37. Think about your whole life over the past 2 weeks. On the whole, how much stress do you think is in your life right now? (*Please check one box*)

None	A little	Moderate	Quite	Extreme
at all	bit	amount	a bit	amount
(1)	(2)	(3)	(4)	(5)
0				

38.	Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
a.	Financial matters	O	D		ŋ	O	
b.	My personal health	0			0		0
c.	Personal or health matters of a family member	٥					٥
d.	Being aboard ship	0	0	ם			<u> </u>
e.	Crowded conditions aboard ship	J		П	D	٥	П
f.	My personal safety aboard ship		a	0		a	o
g.	Maintaining personal hygiene aboard ship	D				ŋ	O
h.	My lack of privacy aboard ship	0			٥	٥	0
i.	My inability to get enough exercise aboard ship	D		O	ם	ס	O
j.	The lack of recreational activities aboard ship	٥		а	O	0	0
k.	My nutrition, the unavailability of desired foods aboard ship	O	o		O	ø	D
1.	The person I work for (my immediate supervisor)	σ	a	a	a	a	0
m.	The people I work with (my peers)	O		a	O	O	O
n.	The people who work for me (those I supervise)	٥	0	а	o	٥	a
0.	The way things are typically done aboard ship		O	D	O	O	

38.	Continued Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
p.	The people with whom I share living space aboard ship		o	0		a	а
q.	My ability to perform my duties	٥	O			O	D
r.	My career and chances for promotion	٥	٥		0	0	0
S.	Being able to stay in the Navy because of downsizing or force reductions						
t.	My relationship with my spouse or boyfriend/girlfriend	0			٥	0	
u	Breaking up with my spouse or boyfriend/girlfriend because of being aboard ship						
v.	My ability to communicate with my family and friends			0	ָם מ		0
w.	My use of alcohol						
x.	My life as a whole		_	0			a
У	(If you have children) My children because of being aboard ship						٥
Z.	(If you have children) Discipline of children	0	0	σ	٥	0	0
aa.	(If you have children) Child- care arrangements				О		

39.	During the past 2 weeks, the stresses listed above have affected my: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	
а.	Personal life						
b.	Performance in my job		0			0	
40.	During the past 2 weeks, how well have you coped with these stresses? (Please check one box)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	
	FAMILY AI	VID ISRAIS	NDS				
41.	How many close friends do you have?  ① ① ② ③ ④ ⑤ ⑥ or more	(Please fi	ll in one (	circle)			
42.	How many relatives do you have that y (1) (2) (3) (4) (5) (6) or more	ou feel clo	ose to? (A	Please fill ir	one cir	cle)	
43.	Altogether, how often do you see these friends and/or relatives? (Check one box)  1						
44.	Are you a member of any clubs or ground I  No Yes	ips? (Che	ck one bo	x)			
45.	Do you belong to a church, temple, or 1 □ No 2 □ Yes	other relig	gious orga	nization? (	Check oi	ıe box)	

46.	Famil	y composition									
	a.	(Unmarried men				•					
		significant other p	person in a	marital-like	relations	hip? (Chec	k one bo	<i>x</i> )			
	••	1 □ No 2 □ Yes									
		20 100									
	b.	Are you a parent?	?								
		1									
		20 165									
	c. How many children (natural, adopted, or stepchildren) under the age of 21										
		currently live in your household? children									
	d.	Are you a single	narant? (Va	u are a sino	ila narant	if you have	maior				
	u.	responsibility for	•	•	-	• •	•	in vour			
		household withou	•				. 0	<i>y</i> 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
		1 🗖 No									
		2 🗖 Yes									
			SYNTHRY		EID						
						•					
47.	If you	experienced a		1	I						
• • •	-	nal problem, how									
	_	l would the									
		ring individuals	Very	Somewhat		Somewhat	Very	Not			
		you? (Check one n each line)	unhelpful (1)	unhelpful (2)	Neutral (3)	helpful (4)	helpful (5)	applicable (9)			
		·									
a.		family					٥	٥			
b.		friends on board		o	0						
	ship										
c.		friends in the	0		O			О			
	Navy										
d.		friends not in the									
	Navy										
e.		ains, ministers, or				П	a				
	other	ciergy									
f.	Other	•		٥	0						
	-	sionals									
g.	Your:	ship's leaders		O	O			D			
h.	Other	professionals not									
	in the	Navy									

# BBBBNGS

48.	Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK. (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Nervousness or shakiness inside	ⅎ		П	Ø	0
b.	Repeated unpleasant thoughts	0	0	ם '	0	0
c.	Faintness or dizziness	٥	П	D	0	О
d.	Loss of sexual interest or pleasure	0		0		
e.	Feeling critical of others	О	П	O	O	O
f.	The idea that someone else can control your thoughts	0	0	o	0	σ
g.	Feeling others are to blame for most of your troubles	٥		D	О	۵
h.	Trouble remembering things	0	0	0	0	0
i.	Feeling easily annoyed or irritated	O	O	J	O	Ø
j.	Pains in heart or chest			0	0	0
k.	Feeling afraid in open spaces	0	ø	D	O	0
1.	Feeling low in energy or slowed down				0	0
m.	Thoughts of ending your life	O	О	П	9	ø
n.	Feeling that most people cannot be trusted	0	a		0	0
0.	Poor appetite		ø	D	0	ø
p.	Crying easily	_		٥	0	0
q.	Suddenly scared for no reason		O		o	ø

48.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.	None	A little	Moderate amount	Quite a bit	Extreme amount
	(Check one box on each line)	(1)	(2)	(3)	(4)	(5)
r.	Temper outbursts that you could not control	0	_			o
S.	Feeling lonely even when you are with people	J		O	٥	
t.	Feeling blocked in getting things done	0	0	O	o o	0
u.	Feeling lonely	٥	D		П	
v.	Feeling blue	0		0		
w.	Worrying too much about things					
x.	Feeling no interest in things		О	o		
y.	Feeling fearful	ם				
z.	Your feelings are easily hurt	0	0			
aa.	Feeling others do not understand you or are unsympathetic	O		ū	O	
bb.	Feeling that people are unfriendly or dislike you	0	0	0	0	O
cc.	Feeling inferior to others	□		O	ø	П
dd.	Nausea or upset stomach		٥	a	o l	0
ee.	Feeling that you are watched or talked about by others	ø	0		ø	ø
ff.	Trouble falling asleep	0	0	٥	0	0
gg.	Having to check and double-check what you do	Ð	0	o		O
hh.	Difficulty making decisions	0	o	o	П	0

48.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much <b>DISCOMFORT</b> that problem has caused you <b>DURING THE PAST WEEK</b> . (Check one box on each line)	None at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
ii.	Feeling afraid to travel	0		<b>D</b>	0	
jj.	Trouble getting your breath	0	0	O		0
kk.	Hot or cold spells	О	٥	□	□	
11.	Having to avoid certain things, places or activities because they frighten you		О	0	0	a
mm.	Your mind going blank		O		ø	
nn.	Numbness or tingling in parts of your body	0				0
00.	The idea that you should be punished for your sins				O	
pp.	Feeling hopeless about the future	o	0	٥	0	0
qq.	Trouble concentrating				O	
rr.	Feeling weak in parts of your body					ם
SS.	Feeling tense or keyed up	ם			ם	
tt.	Thoughts of death or dying				0	
uu.	Having urges to beat, injure or harm someone	О				٥
vv.	Sleep that is restless or disturbed		ם		0	
ww.	Having urges to break or smash things				D	
xx.	Feeling very self-conscious with others	٥		٥	٥	
уу.	Feeling uneasy in crowds			ם		
ZZ.	Never feeling close to another person	◻			□	

48.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
aaa.	Spells of terror or panic		П	□		О
bbb.	Getting into frequent arguments	О	О	٥	0	0
ccc.	Feeling nervous when you are alone	□				٥
ddd.	Others not giving you proper credit for your achievements				0	0
eee.	Feeling so restless you couldn't sit still	O		口		
fff.	Feelings of worthlessness		ם		0	٥
ggg.	Feeling that people will take advantage of you if you let them					
hhh.	Thoughts and images of a frightening nature					٥
iii.	Feelings of guilt	Ø	J			Э
jjj.	The idea that something is wrong with your mind				0	0
kkk.	Spending less time with peers and friends	Ð	O	О	Ø	

COMMENTS AND SUGG	BESTIONS							
Additional comments you would like to add:								
**************************************	AMANAN TO THE CONTRACT OF THE							
	**************************************							

## THANK YOU!

Please return to your shipboard coordinator or:

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

### APPENDIX C.7

Follow-up Survey Instrument, Form WD

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form WD, v.1.5, 9 Sep 1996

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence: I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC). San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809
- 7 I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.

8.	I fully understand the above statements.	By my signature	below,	I give my	voluntary	informed	consent to	participate
in this	research study as it has been explained to	me above.						

Signature:		Date: -	- 199
		Month	Day Year
Permanent address	City	State	Zip Code

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.
TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority: 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

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Toda	ay's date:	Mont	h:	Da	y: Year: 199
Wha  1	t is your current Never married Married Separated Divorced Widowed		? (Check on	ie bo	ox)
Wha	t is your pay gra	de? (Circle o	ne)		
	<u>Enlisted</u>	Warrant <u>Officer</u>	<u>Offi</u>	cer	
E-1 E-2 E-3 E-4 E-5	E-7 E-8 E-9	W-1 W-2 W-3 W-4	O-1 O-2 O-3 O-4		)-5 )-6
If yo		isted, what is	your M.O.	S. nu grouj	
	what ship or com				
Wha	t is your departm	ent? (Check o	ne box)		
1 🗆	Administration		6[	]	Navigation
2 🗖	Air		7 🕻		Operations
3 🗖	Communication	ons	8 🗆	J	Reactor
4 🗍	Deck		9 (	<b>_</b>	Repair
5 🗖	Engineering	·	10 ( 11 (		Supply Other ( <i>Please specify</i> ):
How Year	long have you b	een assigned t	o this ship	or co	ommand?

DEMOGRAPHIC DATA

9.		If you are currently aboard ship, what is your ship's current status? (Check one box)								
	ì 🗖	In home po	ort	3 🗖	In port other than home port					
	2 🗇	At sea		4 🗇	In shipyard					
				9 🗖	Other (Please specify):					
10.	Deplo	oyment status								
	a.	How many	times have you	u deploye	ed during the past 12 months?					
		(For purpos	ses of this ques	stionnaire	, deployment is defined as:					
		•	eduled at sea fo	or 30 days	s or more")					
		Ti	mes							
	b.	Are you cu	rrently deploye	ed (30 da)	ys or more)?					
		(Check one	•							
			(Please skip to	question	11)					
		2  Yes								
	c.	What date of	did you begin t	his deplo	yment?					
		Mo.:	Day:	Year:	199					
11.	Have	vou deployed	l in the Bosnia	area duri	ing the past 12 months? (Check one box)					
	1 🗖	No	<b></b>		(construction)					
	2 🗖	Yes								
12.	Wher	e do vou live	when your shi	in is in vo	our home port? (Check one box)					
·~·	1 🗆	Aboard ship	-	3 □	BEQ/BOQ					
	2 🗍	Navy housi	•	9 🗖	Other					
		-								
			HEAL	H:((0)	NDITIONS					
13.	Have	you had any	of these health	conditio	ns during the past 30 days whether or not it					
10.		-	o sick call or a							
			r "no" or "yes		•					
	a.	1 🗆 No	2 🗖 Yes	Comn	non cold symptoms					
	b.	1 🗖 <b>N</b> o	2 🗖 Yes	Dizzir						
	c.	1 🗖 No	2 ☐ Yes	Chills						
	d.	1 □ No	2 ☐ Yes	Cough						
	e.	1 D No	2 ☐ Yes	Sore t	hroat					
	f.	1 □ No 1 □ No	2 ☐ Yes	Fever						
	g. h.	1 🗆 No	2 □ Yes 2 □ Yes	Flu Diarri	nea lasting at least 3 days					
	i.	1 🗖 No	2 ☐ Yes		ch problems					
		10		Stonia	Programme					

13.	Cor	ntinued Ha	eve you had any	of these health conditions during the past 30 days			
	whether or not it resulted in a visit to sick call or a health care provider?						
	(Plea	se check eiti	her "no" or "yes	" for every condition)			
	j.	1 🗖 No	2 🗆 Yes	Constipation			
	k.	1 🗖 No	2 🗖 Yes	Indigestion			
	1.	1 □ No	2 🗆 Yes	Nausea or vomiting			
	m.	1 🗖 No	2 🗆 Yes	Sinus trouble			
	n.	1 🗖 No	2 🗆 Yes	Hay fever			
	0.	1 🗖 No	2 🗖 Yes	Shortness of breath			
	p.	1 🗖 No	2 🗖 Yes	Hoarseness			
	q.	1 🗖 No	2 🗖 Yes	Skin problems			
	r.	1 🗖 No	2 🗖 Yes	Muscle sprain or strain			
	s.	1 🗖 No	2 🗖 Yes	Back problems			
	t.	1 🗖 No	2 🗖 Yes	Hearing problems			
	u.	1 🗖 No	2 ☐ Yes	Irritated eyes			
	v.	1 🗖 No	2 🗖 Yes	Trouble seeing with one or both eyes even if			
				wearing glasses or contacts			
	w.	1 🗖 No	2 🗖 Yes	Pain in stomach or abdominal area			
	x.	1 🗖 No	2 🗖 Yes	Heat stress or heat stroke			
	у.	1 □ No	2 🗖 Yes	Psychological condition(s) severe enough to interfere			
	•			with daily activities			
	z.	1 🗆 No	2 🗖 Yes	Personal problem(s) severe enough to interfere with			
				daily activities			
	aa.	1 🗖 No	2 🗖 Yes	Other condition or injury			
				Please specify:			
	bb.	1 🗆 No	2 ☐ Yes	Headache:			
		If yes, wa	s your headache:	: (Please check either "no" or "yes" for			
		every cond	lition)				
		1 🗖 No	2 🗖 Yes	Pulsating or throbbing			
		1 🗖 No	2 🗖 Yes	One-sided for at least some portion of the headache			
				(can be either right or left)			
		1 🗖 No	2 🗖 Yes	Severe enough to cause you to stop or decrease your			
				activities			
		1 🗖 No	2 🗖 Yes	Made worse by physical activity			
		•	headache accom	•			
		1 🗖 No	2 🗖 Yes	Visual disturbances			
		1 🗖 No	2 🗖 Yes	Numbness or tingling			
		1 🗖 No	2 🗖 Yes	Sensitivity to noise			
		1 🗖 No	2 🖸 Yes	Sensitivity to light			
		1 🗖 No	2 🗖 Yes	Nausea or vomiting			

14.	During the <b>past 30 days</b> did you receive a doctor's diagnosis of any of these from a healt care provider <b>not on this ship</b> ? ( <i>Please check either "no" or "yes" for every condition</i>						
	a. 1 \(\sigma\) No	2 ☐ Yes	Cold or acute n			revery conduction,	
	b. 1 □ No	2 ☐ Yes	Sore throat, vir	~ •	*8		
	c. 1 □ No	2 ☐ Yes	Cough, viral				
	d. 1 ☐ No	2 ☐ Yes	Flu				
15.			ou been unable to po	erform yo	our milita	ry duties for 1 or	
	more days becau						
	•	•	s" for every condition	•			
	a. 1 🗆 No	2 ☐ Yes	Health problem				
	b. 1 🗆 No	2 ☐ Yes	Emotional prob				
	c. 1 🗆 No	2 ☐ Yes 2 ☐ Yes	Personal proble				
	d. 1 ☐ No e. 1 ☐ No	2 ☐ Yes	Family problem Other	ì			
	e. 1 □ No	21108	Onlei				
16.	-		a doctor told you			If yes, what	
	-		g? (Please check			was your age in	
		* -	eck "Yes," please	No	Yes	years at first	
	write your age o	ıt first diagnosis	)	(1)	(2)	diagnosis?	
a.	Asthma			٥	□		
b.	Migraine heada	che		a	0		
c.	Anemia			O	□		
d.	Depression						
e.	Gonorrhea			O			
f.	Syphilis			0	0		
g.	Chlamydia			O	О		
h.	Urinary tract in	fection		٥	0		
i.	Kidney infection	1		o	0		
j.	Hernia (other th	an hiatal)		٥			
k.	Anorexia or bul	imia		O			
1	Henatitis (Circle	e type) A B	С				

17.	Durin	ng the <b>past 30 days</b> did you visit sick call, a m	edical doctor, or	other health care							
	provi	der to obtain care for yourself for any of the follo	wing reasons? (	Check as many as							
	apply	apply and fill in the number of visits for each reason.)									
	1 🗇	Acute physical illness, not OB-GYN N	o. of visits: 1)2	(3) (4) (5) or more							
	2 🗇	Chronic physical illness, not OB-GYN N	o. of visits: 1)2	(3) (4) (5) or more							
	3 🗖	Acute injury N	o. of visits: 1)2	(3)(4)(5) or more							
	4 🗖	Old or chronic injury N	o. of visits: 1)2	(3)(4)(5) or more							
	5 🗖	Health maintenance or preventive									
		screening									
	6 🗖	Psychological or emotional condition N	1 1	1 1 1							
	7 🗖	Pregnancy test or to pick up test kit N	o. of visits: ①②	)345 or more							
	8 🗖	OB-GYN care N	o. of visits: 1)2	)345 or more							
	9 □ Other No. of visits: ①②③④⑤ or more										
18.	Appro	oximately how many months or days ago was		Number of days							
	your:		Number of	(If less than 1							
	-	n number of months or days for each item)	months	month)							
a.	Most	recent visit to a medical doctor?									
b.	Most	recent visit to another health care									
	profes	ssional? (Please specify type of provider, e.g.,									
	psych	ologist, dentist, nurse-practitioner):									
<b> </b>											
c.	Most	recent visit to a hospital corpsman?									
***************************************				ł							

# OCCUPATIONAL EXPOSURES

19.	Have you been exposed during the any of the factors listed below?	e past	30 da	ys to	If yes:		
ansı	Exposure eck one box on each line. If you wer "yes" to any question, please plete all items on that line.)	No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week	
a.	Adhesives or gluing compounds	o	П	o			
b.	Asbestos (loose)			0			
c.	Carbon monoxide	o	О				
d.	Diesel exhaust within 50 feet	o		0			
e.	Diesel fuel within 50 feet	D	o				
f.	Dry cleaning solvent	o	o				
g.	Exhaust from gasoline engine	o	ø	П			
h.	Gasoline (liquid or vapor)			0			
i.	Guided missile fuel	o		٥			
j.	High temperature (above 95° F)			0			
k.	Hypodermic needles (used)	ø	O				
1.	Insecticides		0	0			
m.	Jet exhaust within 50 feet	O	口				
n.	Jet fuel within 50 feet			0			
о.	Lifting 25 - 49 pounds	О	O	О			
p.	Lifting 50 or more pounds	0	0	0			
q.	Loud noise (such as jets)	٥	O	O			
r.	Low temperature (below 32°F)	0	0	0			
S.	Metal scrapings or filings	O	O				

19.	Continued Have you been expense 30 days to any of the factors l		_		If y	es:
Exposure (Check one box on each line. If you answer "yes" to any question, please complete all items on that line.)			Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week
t.	Paint (oil based) or thinner		o	□		
u.	Paint, other or unknown type	О		O		
v.	Paint scrapings or paint sanding	o	0	0		
w.	Solvent or degreaser	ø		□		
x.	Torpedo fuel	o	0			
y.	Other chemicals (Please specify):					
z.	Video display terminal (VDT, CRT)	0	0			
aa.	Welding fumes	□	П			
bb.	Dust or particles	0				
ec.	Explosives (nonnuclear) within 50 feet					
dd.	Nitrous oxide					
ee.	Ethylene dibromide (EDB)	O	O	O		
ff.	Perchlorethylene (PERC)					
gg.	Have you ever worn a radiation dosimeter or film badge while working aboard ship?				Year first worn	Year last worn

# BIBBSDYBB

20.	Have you smoked at least 100 cigarettes in your entire life? (Check one box)						
	1 🗖	No (Please skip to question 23)					
	2 🗖	Yes					
21.	On h	ow many of the past 30 days did you smoke cigarettes? (Check one box)					
	0 🗆	None					
	1 🗖	1-4 days					
	2 🗇	5-9 days					
	3 🗖	10-14 days					
	4 🗍	15-19 days					
	5 🗖	20-24 days					
	6 🗖	25-29 days					
	7 🗖	Every day					
	9 🗖	Not sure					
22.	On average how many cigarettes did you smoke per day during the past 30 days?						
	•	None box)					
	0 🗖	None  Forward than 1 signments a day, on the average					
	1 🗍	Fewer than 1 cigarette a day, on the average					
	2 🗍	1-4 cigarettes 5-9 cigarettes					
	3 🗍 4 🗍	10-19 cigarettes					
	5 🗍	20-29 cigarettes					
	6 🗍	30-39 cigarettes					
	7 🗍	40-49 cigarettes					
	8 🗍	50 or more cigarettes					
	9 🗖	Not sure					
23.		ng the past 30 days, have you been exposed to tobacco smoke for one (1) hour or					
		per day in your immediate work area? (Check one box)					
	1 🛄	No					
	2 🗖	Yes					
	9 🗖	Not sure					
24.		g the past 30 days, have you been exposed to tobacco smoke for one (1) hour or					
		per day in your sleeping area or other non-working area? (Check one box)					
	1 🖸	No					
	2 🗍	Yes					
	9 🗖	Not sure					

25.	During the past 30 days, have you used any other form of tobacco? (Check all that apply)  □ None  □ Cigars  □ Pipe  □ Smokeless tobacco (snuff or chew)
26.	During the past 7 days, on how many days did you have any alcoholic beverages? (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦ (If you filled in 0, please skip to question 29)
27.	On the days you drank any alcoholic beverage during the past 7 days, how many drinks did you usually have per day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  1 2 3 4 5 6 7 8 9 10  If more, please give no.:
28.	During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  1 2 3 4 5 6 7 8 9 10
29.	In an average 7 days, on how many days do you engage in exercise or sports that lasts at least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days
30.	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑦ days
31.	On the average during the past month, how many days per week were you outside in the sun for 20 minutes or more between 10:00 AM and 2:00 PM? ("In the sun" refers to any direct exposure to the sunlight, even when the sky was cloudy.)  (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days per week  (If you filled in 0, please skip to question 33)

<i>52</i> .		e days marked above, on the average now long were you outside in the sun per day
	betwe	en 10:00 AM and 2:00 PM? (Check one box)
	ı 🗖	20-44 minutes
	2 🗖	45-59 minutes
	3 🗖	1 hour
	4 🗖	2 hours
	5 🗖	3 hours
	6 🗖	4 hours
33.	Calciu	ım intake
	a.	Have you taken any calcium supplements during the past 30 days? (Check one box) $\begin{array}{ccc}  & & & & & & & & & & & & & & & & & \\  & & & &$
	b.	If yes, how many milligrams of calcium do you take per day? milligrams.
	c.	On the average, how many glasses do you usually drink per day of:  (Fill in one circle)  1. Skim milk

#### 34. General Nutrition

	ring the past <b>7 days</b> , approximately many times did you: ( <i>Check one</i> )	Never (1)	1-3 times per week (2)	4-6 times per week (3)	7 or more times per week (4)
a.	Eat high-fat meats or dairy (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream)				O
b.	Eat fried foods (e.g., french fries, fried chicken, fried eggs)	0	0	0	0
c.	Eat refined sugar products (e.g., cakes, pies, cookies, candies)				
d.	Eat low-fat meats or dairy (e.g., chicken or turkey without skin, low-fat milk, yogurt)	0	0	_	0
e.	Eat "leafy" vegetables (e.g., broccoli, cabbage, greens)				
f.	Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes)	o		o	0
g.	Eat fruits (e.g., apples, oranges, raisins, dried fruit, melons, bananas)		П	П	О
h.	Eat high fiber foods (e.g., whole grain breads, cereals, bran)		0	0	0

25	D	
35.	-	ou or your partner currently use any form of birth control to prevent pregnancy?
	(Pleas	se check all that apply)
	1 🗇	Yes, birth control pills
	2 🗖	Yes, condoms or rubbers
	3 🗖	Yes, spermicidal foam or jelly
	4 🗖	Yes, Depo Provera
	5 🗖	Yes, Norplant
	6 🗖	Yes, intrauterine device (IUD)
	7 🗖	Yes, diaphragm
	8 🗖	Yes, other (please specify)
	9 🗖	No, because of a vasectomy or tubal ligation (tubes tied)
	10 🗖	No, I am (or my partner is) sterile
	11 🗖	No, I am not sexually active
	12 🗖	No, I (we) use no method of birth control

36.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.		П		O	٥
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	a		0	a	
c.	I would not have sexual intercourse without using birth control.	П				
d.	I would have sexual intercourse without birth control if my partner wanted me to.	<u> </u>			٥	٥
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.					
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.	0	0	0	0	0

			MOOI	)					
37.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day	Two days (2)	Three days	Four days	Five days (5)	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?	D	٥	٥	O	ø		□	ø
b.	Felt sad?		0	o			0	0	О
C.	Had trouble getting to sleep or staying asleep?	O	О	O	О			O	٥
d.	Felt that everything was an effort?		0	0		0			٥
e.	Felt lonely?		О			ם	ם	П	
f.	Felt you couldn't shake the blues?								
g.	Had trouble keeping your mind on what you were doing?	٥	٥	٥					
	FΛ	MILY	AND		NDS				
38.	Family composition  a. (Unmarried men and other person in a mand ot	rital-like	relation	nship?	(Check	one box	<b>x)</b>		
	c. How many children	(natura	l, adop	ted, or	stepch	ildren)	under	the age	of 21

Are you a single parent? (You are a single parent if you have major responsibility

for raising one or more children under 21 years living in your household without

currently live in your household?

a spouse present.)

1 □ No

Yes

d.

# WOMEN'S SECTION

39.	Menstrual periods									
	a.	During the past 12 months have you had regular menstrual periods? (Check one box)  1  No (Please explain):								
		2 🗆 3 🗖	Yes, about 1 per month. Yes, but not 1 per month. (Please explain):							
	b.	If you missed one or more periods during the past 12 months, please check one box below:								
		I missed my period approximately time(s) during the past 12 months.								
		0 🗆 9 🗖	I had no periods at all during the past 12 mo I'm not sure of the number of periods I missed		g the p	east 12 months				
40.		ck one b	oast 90 days have you taken birth control pilox) 2 □ Yes	ls <u>to r</u>	egulate	your periods?				
41.	Durir 1	No Yes, l	ast 90 days have you taken replacement estrog normone pills.		Check (	one box)				
42.	Has a doctor <i>ever</i> told you that you had any of the following?  If yes, what was your ag									
			one box on each line. If you check "Yes," your age at first diagnosis.)	No (1)	Yes (2)	in years at first diagnosis?				
a.	Abno	rmai Pa	p smear (test for cervical cancer)	□	J					
b.		_	diagnosed as benign breast cyst or fibrocystic se specify):		٥					
c.	Benig	n breast	lump, exact diagnosis unknown	ŋ	n					
d.	Breas	t cancer			o					

# PREGNANCY

43.	How many times have you been pregnant? (Check one box)						
	0 🗖	Never (Please skip to question 46)					
	1 🗇	I have been pregnant times.					
44.	Are y	you pregnant now? (Check one box)					
	1 🗇	No					
	2 🗖	Yes					
	9 🗖	Not sure					
45.	Rece	nt pregnancies					
	a.	Have you been pregnant during the past 12 months? (Check one box)  1 □ No (Skip to question 46)  2 □ Yes					
	b.	How many times have you been pregnant during the past 12 months: times					
	c.	Were you serving aboard this ship when you were informed you were pregnant?  1 □ No (Skip to question 46)  2 □ Yes					
	d.	How many weeks did you serve aboard this ship after your command was notified of your pregnancy? weeks.					
	e.	Were you transferred ashore due to pregnancy?  1 □ No (Skip to question 46)  2 □ Yes					
	f.	How many weeks pregnant were you when transferred off this ship? weeks.					

46.	Please provide the following information in chronological order for the past 12 months.
	For multiple outcomes, make each a separate entry (e.g., two entries for twins). Indicate
	only one "outcome" per pregnancy. If you are uncertain of a detail, provide your best
	estimate.

	Pregnancy		Outcome	What was the approximate date of this outcome?	Were you in the Navy at the time?	1	was your duty type at the time: at Out- come	Was this pregnancy planned?
a.	Most recent	□1 □2 □3 □4 □5	Live Birth Stillbirth Miscarriage/ spontaneous abortion Ectopic pregnancy Elective induced abortion	Year 19 Month	□ 1 No □ 2 Yes	01 02 03 04	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes
b.	Prior pregnancy (or twin)	1 2 3 3 4 5 5	Live Birth Stillbirth Miscarriage/ spontaneous abortion Ectopic pregnancy Elective induced abortion	Year 19 Month	□ 1 No □ 2 Yes	□ 1 □ 2 □ 3 □ 4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes

47.	What is your best estimate of the likelihood that you will become pregnant	in the next 12
	months?	
	(Fill in a number between 0 and 100, with 0 representing no chance that	t the event will
	occur, and 100 representing that the event definitely will occur):	percent

# COMMENTS AND SUGGESTIONS Additional comments you would like to add:

## THANK YOU!

Please return to your shipboard coordinator or:

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

#### APPENDIX C.8

Follow-up Survey Instrument, Form MD

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form MD, v.1.5, 9 Sep 96

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- 1. I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving abound. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- 7. I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.

Signa	hire:		Date:	_	- 199
in this	research study as it has been explained to	me above.			
8.	I fully understand the above statements.	By my signature below,	I give my voluntary	informed cor	isent to participate

Permanent address City State Zip Code

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.
TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

Year

Month

Day

#### Information to Participants

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071 OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- 1. Jam being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.
- 8. I fully understand the above statements.

#### Information to Participants

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

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1000	y's date:	Mont	h:	Day	: Year: 199	
1	is your current Never married Married Separated Divorced Widowed		? (Check oi	ne box	)	
What is your pay grade? (Circle one)						
Enlisted		Warrant Officer	Off	officer		
If you How Num	E-8 E-9 u are Navy enli	ulisted, what is urrently are in Num	your M.O. your work mber of wo	.S. nui group men:	6 SN, FN BT, HM, ASM)? mber?	
What 1	is your departn Administration Air Communication Deck Engineering	on	6 7 8 9 10		Navigation Operations Reactor Repair Supply Other ( <i>Please specify</i> ):	

9.	If you are currently aboard ship, what is your ship's current status? (Check one box)								
	1 🗇	In home po	rt	3 🗖	In port other than home port				
	2 🗇	At sea		4 🗇	In shipyard				
	20	110 500		9 🗖	Other ( <i>Please specify</i> ):				
					, , , , , , , , , , , , , , , , , , ,				
10.	Deployment status								
	a.	How many times have you deployed during the past 12 months?							
		(For purposes of this questionnaire, deployment is defined as:							
		"Ship scheduled at sea for 30 days or more")							
	Times								
	b.	Are you currently deployed (30 days or more)?							
	0.	(Check one box)							
		1  No (Please skip to question 11)							
		2 ☐ Yes							
	•	TYThat date did was begin this danlarmanto							
	c.	What date did you begin this deployment?  Mo: Pay: Vear: 199							
		Mo.: Day: Year: 199							
11.	Have you deployed in the Bosnia area during the past 12 months? (Check one box)								
	1 🗖	No							
	2 🗖	Yes							
12.	Where do you live when your ship is in your home port? (Check one box)								
12.									
	2 🗇	Navy housi	•	9 🗖	Other				
			<i>U</i>						
			HIBAN	III CO	NDITIONS				
13.	Have you had any of these health conditions during the past 30 days whether or not is								
	resulted in a visit to sick call or a health care provider?								
	(Plea		er "no" or "yes	•	•				
	a.	1 □ No	2 🗇 Yes		non cold symptoms				
	b.	1 □ No	2 ☐ Yes	Dizzi					
	c. d.	1 □ No 1 □ No	2 ☐ Yes 2 ☐ Yes	Chills Coug					
	e.	1 🗆 No	2 ☐ Yes	_	throat				
	f.	1 🗆 No	2 ☐ Yes	Fever					
	g.	1 □ No	2 ☐ Yes	Flu					
	h.	1 □ No	2 ☐ Yes		hea lasting at least 3 days				
	i.	1 □ No	2 🗆 Yes		ach problems				

13.				y of these health conditions during the past 30 days isit to sick call or a health care provider?
				s" for every condition)
	j.	ı □ No	2 ☐ Yes	Constipation
	k.	1 🗆 No	2 ☐ Yes	Indigestion
	1.	1 □ No	2 ☐ Yes	Nausea or vomiting
	m.	1 □ No	2 ☐ Yes	Sinus trouble
	n.	1 🗖 No	2 ☐ Yes	Hay fever
	0.	1 □ No	2 ☐ Yes	Shortness of breath
	р.	1 □ No	2□ Yes	Hoarseness
	q.	1 □ No	2□ Yes	Skin problems
	r.	ı □ No	2 ☐ Yes	Muscle sprain or strain
	s.	1 □ No	2 ☐ Yes	Back problems
	t.	1 🗆 No	2□ Yes	Hearing problems
	u.	1 🗆 No	2 ☐ Yes	Irritated eyes
	v.	1 □ No	2 ☐ Yes	Trouble seeing with one or both eyes even if
	, -			wearing glasses or contacts
	w.	1 🗖 No	2 ☐ Yes	Pain in stomach or abdominal area
	х.	1 🗖 No	2 ☐ Yes	Heat stress or heat stroke
	у.	1 □ No	2 ☐ Yes	Psychological condition(s) severe enough to interfere
	<b>J</b>			with daily activities
	Z.	1 🗖 No	2 ☐ Yes	Personal problem(s) severe enough to interfere with
				daily activities
	aa.	1 🗖 No	2 ☐ Yes	Other condition or injury
				Please specify:
	bb.	1 □ No	2 ☐ Yes	Headache:
		If yes, was	s your headache	e: (Please check either "no" or "yes" for
		every cond	lition)	
		1 □ No	2 ☐ Yes	Pulsating or throbbing
		1 □ No	2 🗆 Yes	One-sided for at least some portion of the headache
				(can be either right or left)
		1 🗖 No	2 🗖 Yes	Severe enough to cause you to stop or decrease your
				activities
		1 🗖 No	2 🗖 Yes	Made worse by physical activity
		Was your	headache accon	npanied by:
		1 🗖 No	2 🗖 Yes	Visual disturbances
		1 🗖 No	2 🗆 Yes	Numbness or tingling
		1 🗆 No	2 🗆 Yes	Sensitivity to noise
		1 🗖 No	2 🗆 Yes	Sensitivity to light
		1 🗖 No	2 🗖 Yes	Nausea or vomiting

14. During the past 30 days did you receive a doctor's diagnosis of any of these from a health							
		-		(Please check either			r every condition)
	a.	1 □ No	2 ☐ Yes	Cold or acute n		ngitis	
	b.	1 □ No	2 ☐ Yes	Sore throat, vir	ai		
	C.	1□ No	2 ☐ Yes	Cough, viral			
	d.	1 🗖 No	2 ☐ Yes	Flu			
15.		~ .	•	u been unable to po	erform yo	ur milita	ry duties for 1 or
		•	of the reasons		,		
	-		•	" for every condition			
	a.	1 □ No	2 ☐ Yes	Health problem			
	b.	1 🗖 No	2 ☐ Yes 2 ☐ Yes	Emotional problem			
	c. d.	1 □ No 1 □ No	2 ☐ Yes	Personal proble Family problem			
	и. е.	1 🗆 No	2 🗆 Yes	Other	L		
	C.	I LJ INO	20 103	Other			
16.	Du	ring the past 1	<b>2 months</b> , has	a doctor told you			If yes, what
	that you had any of the following? (Please check					was your age in	
	one	box on each	line. If you che	eck "Yes," please	No	Yes	years at first
***********************	wri	te your age at	first diagnosis	)	(1)	(2)	diagnosis?
a.	Ast	hma			O		
b.	Mi	graine headach	ne		a	О	
¢.	An	emia			ø		
d.	Dej	pression					
e.	Go	norrhea				O	
f.	Syp	hilis					
g.	Chl	amydia				o	
h.	Uri	nary tract infe	ction		0		
1.	Kid	ney infection					
j.	Hei	rnia (other tha	n hiatal)		o	0	
k.	An	orexia or bulir	nia		Ø		
1	Не	natitis (Circle	type) A B	C	П	П	

		ng the past 30 days did you visit sick call, a m		
	provi	der to obtain care for yourself for any of the follo	owing reasons? (	Check as many as
	apply	and fill in the number of visits for each reason.	)	
	1 🗖	Acute physical illness N	o. of visits: 1)2	345 or more
	2 🗖	Chronic physical illness N	o. of visits: 1)2	345 or more
	3 🗖	Acute injury N	o. of visits: 1)2	345 or more
	4 🗖	Old or chronic injury N	o. of visits: 1)2	(3)(4)(5) or more
	5 🗍	Health maintenance or preventive		_
		screening		
	6 🗖	Psychological or emotional condition N		
	9 🗖	Other N	o. of visits: 1)2	345 or more
18.	your:	oximately how many months or days ago was  n number of months or days for each item)	Number of months	Number of days (If less than 1 month)
18. a.	your: (Fill i			(If less than 1
	your: (Fill i Most Most profes	n number of months or days for each item)		(If less than 1

# OCCUPATIONAL EXPOSURES

19.	Have you been exposed during the any of the factors listed below?	If yes:				
Exposure (Check one box on each line. If you answer "yes" to any question, please complete all items on that line.)		No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week
a.	Adhesives or gluing compounds	٥	ⅎ	□		
b.	Asbestos (loose)		O	0	·	
c.	Carbon monoxide	ⅎ	٦	П		
d.	Diesel exhaust within 50 feet	0	0			
e.	Diesel fuel within 50 feet	П	□			
f.	Dry cleaning solvent		0			
g.	Exhaust from gasoline engine	٥		О		
h.	Gasoline (liquid or vapor)	0		o		
i.	Guided missile fuel	П	П	П		
j.	High temperature (above 95° F)		o			
k.	Hypodermic needles (used)		ם	П		
1.	Insecticides					
m.	Jet exhaust within 50 feet					
n.	Jet fuel within 50 feet					
o.	Lifting 25 - 49 pounds					
p.	Lifting 50 or more pounds					
q.	Loud noise (such as jets)					
r.	Low temperature (below 32°F)					
S.	Metal scrapings or filings					

19.	Continued Have you been exp past 30 days to any of the factors I	If yes:				
Exposure (Check one box on each line. If you answer "yes" to any question, please complete all items on that line.)		No (1)	Yes (2)	Not sure (9)	Usual no. of hours exposed per day	Usual no. of days exposed per week
t.	Paint (oil based) or thinner	o		o	·	
u.	Paint, other or unknown type	□	ø			
v.	Paint scrapings or paint sanding		o			
w.	Solvent or degreaser	ø	•			
x.	Torpedo fuel	0	0			
y.	Other chemicals (Please specify):	0				
z.	Video display terminal (VDT, CRT)	0	0	٥		
aa.	Welding fumes	□		O		
bb.	Dust or particles	0	0			
cc.	Explosives (nonnuclear) within 50 feet	O				
dd.	Nitrous oxide					
ee.	Ethylene dibromide (EDB)		П	П		
ff.	Perchlorethylene (PERC)	0				
gg.	Have you ever worn a radiation dosimeter or film badge while working aboard ship?				Year first worn	Year last worn  19

# MEESINALE

20.	Have 1 □ 2 □	you smoked at least 100 cigarettes in your entire life? (Check one box) No (Please skip to question 23) Yes
21.	On h	ow many of the past 30 days did you smoke cigarettes? (Check one box)
•	0 🗇	None
	1 🗇	1-4 days
	2 🗖	5-9 days
	3 🗖	10-14 days
	4 🗍	15-19 days
	5 🗖	20-24 days
	6 🗖	25-29 days
	7 🗖	Every day
	9 🗖	Not sure
22.		verage how many cigarettes did you smoke per day during the <b>past 30 days</b> ?
	0 🗖	None
	1 🗇	Fewer than 1 cigarette a day, on the average
	2 🗇	1-4 cigarettes
	3 🗖	5-9 cigarettes
	4 🗖	10-19 cigarettes
	5 🗖	20-29 cigarettes
	6 🗖	30-39 cigarettes
	7 🗖	40-49 cigarettes
	8 🗖	50 or more cigarettes
	9 🗖	Not sure
23.		ng the <b>past 30 days</b> , have you been exposed to tobacco smoke for one (1) hour or per day in your immediate work area? ( <i>Check one box</i> )
	1 🗇	No
	2 🗖	Yes
	9 🗖	Not sure
24.		ng the <b>past 30 days</b> , have you been exposed to tobacco smoke for one (1) hour or per day in your sleeping area or other non-working area? ( <i>Check one box</i> )  No
	2 🗍	Yes
	9 🗖	Not sure
	<b>ا</b>	THE DATA

o □ None
1 🗖 Cigars
2  Pipe
3 ☐ Smokeless tobacco (snuff or chew)
During the past 7 days, on how many days did you have any alcoholic beverages? (Fill in one circle)
① ① ② ③ ④ ⑤ ⑥ ⑦ (If you filled in 0, please skip to question 29)
On the days you drank any alcoholic beverage during the past 7 days, how many drinks did you usually have per day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  1 2 3 4 5 6 7 8 9 10  If more, please give no.:
During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.)  (Fill in one circle)  1 2 3 4 5 6 7 8 9 10  If more, please give no.:
In an average 7 days, on how many days do you engage in exercise or sports that lasts at least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days
In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days
On the average during the past month, how many days per week were you outside in the sun for 20 minutes or more between 10:00 AM and 2:00 PM? ("In the sun" refers to any direct exposure to the sunlight, even when the sky was cloudy.)  (Fill in one circle)  (1) (2) (3) (4) (5) (6) (7) days per week  (If you filled in 0, please skip to question 33)

32.	On the days marked above, on the average how long were you outside in the sun per day					
	betwe	een 10:00 AM and 2:00 PM? (Check one box)				
	1 🗖	20-44 minutes				
	2 🗖	45-59 minutes				
	3 🗖	1 hour				
	4 🗇	2 hours				
	5 🗖	3 hours				
	6 🗖	4 hours				
33.	Calci	um intake				
	a.	Have you taken any calcium supplements during the past 30 days? (Check one box)  1 □ No 2 □ Yes				
	b.	If yes, how many milligrams of calcium do you take per day?  milligrams.				
	c.	On the average, how many glasses do you usually drink per day of: (Fill in one circle)  1. Skim milk				

24	C 1	N.T	4
34.	General	INU	uriuon

	ing the past 7 days, approximately many times did you: (Check one)	Never (1)	1-3 times per week (2)	4-6 times per week (3)	7 or more times per week (4)
a.	Eat high-fat meats or dairy (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream)	٥			
b.	Eat fried foods (e.g., french fries, fried chicken, fried eggs)	٥	0	0	0
c.	Eat refined sugar products (e.g., cakes, pies, cookies, candies)	ø			
d.	Eat low-fat meats or dairy (e.g., chicken or turkey without skin, low-fat milk, yogurt)		0		0
e.	Eat "leafy" vegetables (e.g., broccoli, cabbage, greens)	٥			
f.	Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes)	0	0	0	0
g.	Eat fruits (e.g., apples, oranges, raisins, dried fruit, melons, bananas)				
h.	Eat high fiber foods (e.g., whole grain breads, cereals, bran)	0	0	0	0

35.	Do you or your partner currently use any form of birth control to prevent pregnancy?
	(Please check all that apply)
	1 ☐ Yes hirth control nills

l	Yes,	birth	control	pills
	 	_		

- 2 ☐ Yes, condoms or rubbers
- 3 ☐ Yes, spermicidal foam or jelly
- 4 ☐ Yes, Depo Provera
- 5 ☐ Yes, Norplant
- 6 ☐ Yes, intrauterine device (IUD)
- 7 ☐ Yes, diaphragm
- 8 ☐ Yes, other (please specify)\_
- 9 □ No, because of a vasectomy or tubal ligation (tubes tied)
- 10 □ No, I am (or my partner is) sterile
- 11 ☐ No, I am not sexually active
- 12  $\square$  No, I (we) use no method of birth control

36.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  eck one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me,				J	٥
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	o	٥	٥	۵	
C.	I would not have sexual intercourse without using birth control.			П		
d.	I would have sexual intercourse without birth control if my partner wanted me to.	0	0	0	٥	o
e	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.					
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.		0		0	

					MOOL	)					
37.	past 7	days h	ays during the ave you: ox on each	No days (0)	One day	Two days (2)	Three days	Four days (4)	Five days (5)	Six days (6)	Seven days (7)
a.	Felt ye		couldn't get	ŋ			ø	O		D	D
b.	Felt sa	ıd?		□		0	0	0	0	0	
¢.		ouble g /ing ask	etting to sleep eep?	J	٥		O			J	O
d.	Felt the effort?	-	ything was an	o						٥	
e.	Felt lo	mely?			О			O			
f.	Felt you		ln't shake the							0	o o
g,		on what	eeping your you were	ם						J	
				185 186	AMIL	Y		•			
38.	Family a.	-	osition erried men and voerson in a mari No Yes	-	•			-		th a sig	nificant
	b.	Are you	ou a parent? No Yes								
	c.		many children tly live in your				stepch _ childre		under	the age	e of 21
	d.	for rai.	ou a single paren sing one or mor se present.) No							_	•

2 🗖

Yes

COMMENTS AND SUGGESTIONS
Additional comments you would like to add:

Please return to your shipboard coordinator or:

THANK YOU

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

#### APPENDIX C.9

TWA Flight 800 Recovery Operations, Form WB G

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



## NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form WB, v.1.5, 09 Sep 96

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC). San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.

8.	I fully understand the above statements.	By my signature belo	ow, I give my	voluntary inf	formed consent	to participate
in this	research study as it has been explained to	me above.				

Signature:		Date: -				
			Month	Day	Year	
Permanent address	City		State	Zip Code		

#### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- 1. I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities:
- 6. If I have questions about this research study I should contact the principal investigator. Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- 7 I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center, San Diego, CA 92186-5122.
- 8. I fully understand the above statements.

#### Information to Participants

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

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	Today	's date:	Month:		Day:	Year: 199
	1	is your current Never married Married Separated Divorced Widowed	marital status? d	(Check on	e box)	
	What i	is your pay gra	ide? (Circle one)	)		
	<u>E</u>	<u>nlisted</u>	Warrant <u>Officer</u>	<u>Offi</u>	<u>cer</u>	
	E-1 E-2 E-3 E-4 E-5		W-1 W-2 W-3 W-4	O-1 O-2 O-3 O-4	O-5 O-6	
	If you	are Navy enlis	sted, what is you	r rating (e.	g., SN, F	N BT, HM, ASM)?
	If you	are Marine en	listed, what is yo	our M.O.S.	number	?
			ırrently are in yo			
•	To wh	at ship or com	mand are you cu	rrently ass	igned?	
	What i	s your departr	nent? (Check on	e box)		
	1	Administration Air Communicate Deck Engineering	on	6 [ 7 [ 8 [ 9 [ 10	Ope Rea Rep Sup	· · · · · · · · · · · · · · · · · · ·

9. If you are currently aboard ship, what is your ship's current status? (Check one box)					
	ì 🗆	In home por	rt	3 🗖	In port other than home port
	2 🗖	At sea		4 🗖	In shipyard
				9 🗖	Other (Please specify):
10.	Deple	oyment status			
	a.	How many	times have you	ı deploye	d during the past 12 months?
		`			deployment is defined as:
		•	duled at sea fo	r 30 days	or more")
		Tir	nes		
	b.	Are you cur	rently deployed	d ( <b>30 day</b>	s or more)?
		(Check one	box)		
			Please skip to	question	11)
		2 ☐ Yes			
	c.	What date d	id you begin th	nis deploy	ment?
			_ Day:		
11.	Наме	vou denloved	in the Rosnia	area durin	ng the past 12 months? (Check one box)
11.	1 🗇	No	in the Bosina	arca durii	ig the past 12 months: (Check one box)
	2 🗇	Yes			
12.		•			r home port? (Check one box)
	1 🗇	Aboard ship		3 🗇	BEQ/BOQ
	2 🗍	Navy housing	ng	9 🗖	Other
			HIBAN	(##Y@Y@)	NDITIONS
13.	Have	you had any o	of these health	condition	s during the past 30 days whether or not it
			sick call or a l		<del>-</del>
	`		r "no" or "yes	•	
	a.	1 □ No	2 ☐ Yes		non cold symptoms
	b.	1 □ No 1 □ No	2□Yes 2□Yes	Dizziı Chills	
	c. d.	1 🗖 No	2  Yes	Cougl	
	и. e.	1 🗖 No	2  Yes	Sore t	
	f.	1 🗖 No	2 ☐ Yes	Fever	in out
	g.	1 🗆 No	2 ☐ Yes	Flu	
	h.	1 🗖 No	2 ☐ Yes		nea lasting at least 3 days
	i.	1 🗖 No	2 ☐ Yes		ach problems

			these health conditions during the past 30 days
			to sick call or a health care provider?
(Plea	se check either	"no" or "yes"	for every condition)
j.	1 🗖 No	2 🗖 Yes	Constipation
k.	1 🗖 No	2 🗖 Yes	Indigestion
1.	1 🗖 No	2 🗖 Yes	Nausea or vomiting
m.	1 🗖 No	2 ☐ Yes	Sinus trouble
n.	1 🗖 No	2 🗖 Yes	Hay fever
0.	1 🗖 No	2 🗖 Yes	Shortness of breath
p.	1 🗖 No	2 🗖 Yes	Hoarseness
q.	1 🗖 No	2 ☐ Yes	Skin problems
r.	1 🗖 No	2 ☐ Yes	Muscle sprain or strain
s.	1 🗆 No	2 ☐ Yes	Back problems
t.	1 □ No	2 ☐ Yes	Hearing problems
u.	1 □ No	2 ☐ Yes	Irritated eyes
v.	1 🗖 No	2 ☐ Yes	Trouble seeing with one or both eyes even if
			wearing glasses or contacts
w.	1 🗖 No	2 ☐ Yes	Pain in stomach or abdominal area
x.	1 🗖 No	2 ☐ Yes	Heat stress or heat stroke
y.	1 🗖 No	2 🗖 Yes	Psychological condition(s) severe enough to
			interfere with daily activities
Z.	1 🗖 No	2 ☐ Yes	Personal problem(s) severe enough to interfere with
			daily activities
aa.	1 🗖 No	2 ☐ Yes	Other condition or injury
			Please specify:
bb.	1 🗖 No	2 ☐ Yes	Headache:
	If yes, was yo	our headache: (	Please check either "no" or "yes" for
	every conditi	on)	
	1 🗖 No	2 🗖 Yes	Pulsating or throbbing
	1 🗖 No	2□ Yes	One-sided for at least some portion of the headache
			(can be either right or left)
	1 🗖 No	2 🗖 Yes	Severe enough to cause you to stop or decrease your
			activities
	1 🗖 No	2 🗖 Yes	Made worse by physical activity
	•	adache accomp	
	1 🗖 No	2 🗖 Yes	Visual disturbances
	1 🗖 No	2 ☐ Yes	Numbness or tingling
	1 🗖 No	2 🗖 Yes	Sensitivity to noise
	1 🗖 No	2 ☐ Yes	Sensitivity to light
	1 🗖 No	2 🗖 Yes	Nausea or vomiting

13.

During the <b>past 30 days</b> did you receive a doctor's diagnosis of any of these from a health care provider <b>not on this ship</b> ? ( <i>Please check either "no" or "yes" for every condition</i> )							
	a. 1 □ No 2 □ Yes			Cold or acute n	asopharyn	gitis	
	b.	1 🗖 No	2 🗖 Yes	Sore throat, vira	al	•	
	c.	1 🗆 No	2 🗖 Yes	Cough, viral			
	d.	1 🗖 No	2 🗖 Yes	Flu			
15.			days have you of the reasons	been unable to per below?	form you	military	duties for 1 or
	(Plea	ase check eithe	r "no" or "yes	" for every condition	on)		
	a.	1 🗆 No	2 🗖 Yes	Health problem			
	b.	1 🗖 No	2 🗖 Yes	Emotional prob			
	c.	1 🗖 No	2 🗖 Yes	Personal proble			
	d.	1 🗖 No	2 🗖 Yes	Family problem	ì		
	e.	1 🗖 No	2 🗖 Yes	Other			
16.	that i	you had any of	the following?  The ine. If you check	doctor told you ? (Please check k "Yes," please	No (1)	Yes (2)	If yes, what was your age in years at first diagnosis?
a.	Asth	ma			О	J	
b.	Migr	raine headache			O	o	
c.	Anei	mia			О		
d.	Depr	ession			0	0	
e.	Gon	orrhea			О		
f.	Syph	nilis			0		
g.	Chla	mydia			0	ם	
h.	Urin	ary tract infect	ion		0		
i.	Kidn	ey infection				ם	
j.	Hern	ia (other than l	niatal)		0		
k.	Anor	exia or bulimi	a		O	ם	
1	Hens	titis (Circle ty	ne) A R		¬	כ	

17.	During the past 30 days did you visit sick call, a provider to obtain care for yourself for any of the apply and fill in the number of visits for each reast □ Acute physical illness, not OB-GYN	following reasons? (Coon.)  No. of visits: ①②	Check as many as  2345 or more
18.	Approximately how many months or days ago wayour: (Fill in number of months or days for each item)	Number of months	Number of days (If less than 1 month)
a.	Most recent visit to a medical doctor?		
b.	Most recent visit to another health care profession (Please specify type of provider, e.g., psychologist dentist, nurse-practitioner):		
C.	Most recent visit to a hospital corpsman?		
	BINESTYBE		
19.	Have you smoked at least 100 cigarettes in your  1 □ No (Please skip to question 22)  2 □ Yes	entire life? (Check o	ne box)
20.	On how many of the <b>past 30 days</b> did you smoke  0 □ None  1 □ 1-4 days  2 □ 5-9 days  3 □ 10-14 days  4 □ 15-19 days  5 □ 20-24 days  6 □ 25-29 days  7 □ Every day  9 □ Not sure	e cigarettes? (Check o	ne box)

21.	On average how many cigarettes did you smoke per day during the past 30 days?					
	(Check one box)					
	0 □ None					
	Fewer than 1 cigarette a day, on the average					
	2 ☐ 1-4 cigarettes					
	3 ☐ 5-9 cigarettes					
	4 □ 10-19 cigarettes					
	5 □ 20-29 cigarettes					
	6 ☐ 30-39 cigarettes					
	7 □ 40-49 cigarettes					
	8 ☐ 50 or more cigarettes					
	9 □ Not sure					
22.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour	or				
	more per day in your immediate work area? (Check one box)					
	1 □ No					
	2 □ Yes					
	9 □ Not sure					
23.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour or					
	more per day in your sleeping area or other non-working area? (Check one box)					
	1 🗖 No					
	2 ☐ Yes					
	9 ☐ Not sure					
24.	During the past 30 days, have you used any other form of tobacco? (Check all that					
	apply)					
	0 □ None					
	1 Cigars					
	2 ☐ Pipe					
	3 ☐ Smokeless tobacco (snuff or chew)					
25.	During the past 7 days, on how many days did you have any alcoholic beverages?					
	(Fill in one circle)					
	0 1 2 3 4 5 6 7					
	(If you filled in 0, please skip to question 28)					
26.	On the days you drank any alcoholic beverage during the past 7 days, how many					
	drinks did you usually have per day? (Consider a single shot, single mixed drink,					
	glass of wine, or can of beer as 1 drink.) (Fill in one circle)					
	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ○ If more, please give no.:					

27.	During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) If more, please give no.:						
28.	n average 7 days, on how many days do you engage in exercise or sports that lasts ast 20 minutes without stopping, and that is hard enough to make you breathe ier and your heart beat faster?: (Fill in one circle)  1) 2 3 4 5 6 7 days						
29.	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days						
30.	My current:  a. Weight is pounds.  b. Height is feet and inches.						
31.	Calcium intake  a. Have you taken any calcium supplements during the past 30 days? (Check one box)  1  No 2  Yes						
	b. If yes, how many milligrams of calcium do you take per day? milligrams.						
	c. On the average, how many glasses do you usually drink per day of:  (Fill in one circle)  1. Skim milk						

32.	$\sim$ 1	Nutrition	
2'1	( Janaral	Niitrition	

32.	General Nutrition	F			
	During the past 7 days, approximately how many times did you: (Check one box)	Never (1)	1-3 times per week (2)	4-6 times per week (3)	7 or more times per week (4)
a.	Eat high-fat meats or dairy (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream)		٥		
b.	Eat fried foods (e.g., french fries, fried chicken, fried eggs)	o	0	a	
c.	Eat refined sugar products (e.g., cakes, pies, cookies, candies)		O		
d.	Eat low-fat meats or dairy (e.g., chicken or turkey without skin, low-fat milk, yogurt)	o	σ	0	0
e.	Eat "leafy" vegetables (e.g., broccoli, cabbage, greens)	O			
f.	Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes)	٥	0	0	0
g.	Eat fruits (e.g., apples, oranges, raisins, dried fruit, melons, bananas)			О	П
h.	Eat high fiber foods (e.g., whole grain breads, cereals, bran)	0			

33. During the past 30 days, on the average, how many hours of sleep did you get per 24 hours? (Fill in one circle)

1 2 3 4 5 6 7 8 9 10 hours

34.	(Please check all that apply)  1  Yes, birth control pills  2  Yes, condoms or rubbers  3  Yes, spermicidal foam or jelly  4  Yes, Depo Provera  5  Yes, Norplant  6  Yes, intrauterine device (IUD)  7  Yes, diaphragm  8  Yes, other (please specify)  9  No, because of a vasectomy of  10  No, I am (or my partner is) state  11  No, I am not sexually active  12  No, I (we) use no method of b	tubal ligat	ion (tube	•	event preg	gnancy?
35.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.	٥				
b.	I think it is very important to use birth control after marriage until you have decided to start a family.			0	o	٥
c.	I would not have sexual intercourse without using birth control		O		O	ם
đ.	I would have sexual intercourse without birth control if my partner wanted me to.	0	٥	o	0	
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.	0	0	D	O	O
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.		σ	0	o	٥

## (0,00/\BBB)/(0)EBEE

	•		<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>			T	<del>, , , , , , , , , , , , , , , , , , , </del>	
36.	How do you feel about your: (Check one box on each line)	Terrible (1)	Unhappy (2)	Mostly dissatisfied (3)	Mixed (4)	Mostly satisfied (5)	Pleased (6)	Delighted (7)
a.	Job?	o	0	o	O		0	o
b.	Personal life?		О		О	О	Ø	0
c.	Health and physical condition?	О	٥	О	0	0	0	o
d.	Life as a whole?			О	ø	□	ø	0
e.	Family?	0		0				О
f.	(If married) Spouse?	O			O			
g.	(If you have children) Children?	0	0	0		0		٥
h.	(If you live in military housing ashore) Military housing ashore?							О
i.	(If you live aboard ship) Living conditions aboard ship?	0	0		0	0	0	σ
j.	(If you live in other housing ashore) Other housing ashore?			۵	J	D	D	
k.	Military pay?	0	o	0				0

37.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day (1)	Two days (2)	Three days	Four days (4)	Five days (5)	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?		۵	П	O	D		П	D
b.	Felt sad?	0	0	0	0	0	0		0
c.	Had trouble getting to sleep or staying asleep?		٥	D	П				П
d.	Felt that everything was an effort?		a	0	a	٥	0	D	
e.	Felt lonely?	О		9	ø	0	ø	ø	3
f.	Felt you couldn't shake the blues?		0	o	٥	g		a	o
g.	Had trouble keeping your mind on what you were doing?	٥		a	□	٥	П	٥	o

#### SHRESS

38. Think about your whole life over the past 2 weeks. On the whole, how much stress do you think is in your life right now? (*Please check one box*)

None	A little	Moderate	Quite	Extreme
at all	bit	amount	a bit	amount
(1)	(2)	(3)	(4)	(5)
			D	0

39.	Of the stress that you experience, how much comes from problems or concerns					,	
	with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
a.	Financial matters	□	σ			О	
b.	My personal health	0		<b></b>	ם		٥
C.	Personal or health matters of a family member	٥		٥		٥	٥
d.	Being aboard ship					0	٥
e.	Crowded conditions aboard ship	D					
f.	My personal safety aboard ship			٥		0	٥
g.	Maintaining personal hygiene aboard ship						٥
h.	My lack of privacy aboard ship	0	0			0	O
i.	My inability to get enough exercise aboard ship						O
j.	The lack of recreational activities aboard ship						0
k.	My nutrition, the unavailability of desired foods aboard ship			ם			П
1.	The person I work for (my immediate supervisor)	0	_	0		0	0
m.	The people I work with (my peers)						
n.	The people who work for me (those I supervise)	_	0	0	0	0	_
o.	The way things are typically done aboard ship						

39.	Continued Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
p.	The people with whom I share living space aboard ship			_		0	0
q.	My ability to perform my duties				J		
r.	My career and chances for promotion	0	_			٥	
S.	Being able to stay in the Navy because of downsizing or force reductions						
t.	My relationship with my spouse or boyfriend/girlfriend					0	
11.	Breaking up with my spouse or boyfriend/girlfriend because of being aboard ship				O		П
v.	My ability to communicate with my family and friends			0	0	_	_
w.	My use of alcohol						
x.	My life as a whole		0	0	٥		
у.	(If you have children) My children because of being aboard ship						
z.	(If you have children) Discipline of children		0	0	0	0	0
aa.	(If you have children) Child- care arrangements				0	O	ø

40.	During the <b>past 2 weeks</b> , the stresses listed above have affected my: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)			
a.	Personal life		٥	J	O	O			
b.	Performance in my job					0			
41.	During the past 2 weeks, how well have you coped with these stresses?  (Please check one box)  Not at all bit amount (2) (3) (4) (5)								
	FAMILY A	NDIBRI	ENDS						
42.	How many close friends do you have? (Please fill in one circle)  (1) (2) (3) (4) (5) (6) or more								
43.	How many relatives do you have that you in the second of t	ou feel clo	ose to? (I	Please fill ir	one cir	cle)			
44.	Altogether, how often do you see these friends and/or relatives each month? (Check one box)  1								
45.	Are you a member of any clubs or ground I □ No 2 □ Yes	ps? (Che	eck one bo	x)					
46.	Do you belong to a church, temple, or other religious organization? (Check one box)  1  No 2  Yes								

47.	Family	composition								
		(Unmarried men a significant other p 1 □ No 2 □ Yes		•						
		Are you a parent?  1 □ No 2 □ Yes								
		How many childre currently live in y		-	r stepchild child		the age	of 21		
		<ul> <li>d. Are you a single parent? (You are a single parent if you have major responsibility for raising one or more children under 21 years living in your household without a spouse present.)</li> <li>1 □ No</li> <li>2 □ Yes</li> </ul>								
	Sourges of Head									
48.	persona helpful followi be to ye	experienced a al problem, how would the ng individuals ou? (Check one each line)	Very unhelpful (1)	Somewhat unhelpful (2)	Neutral (3)	Somewhat helpful (4)	Very helpful (5)	Not applicable (9)		
a.	Your fa	amily			П			O		
b.	Your fi ship	riends on board		a	0	0	0			
c.	Other f Navy	riends in the		o	J		D	0		
d.	Other f Navy	riends not in the	٥	o	o	0	0	0		
e.	Chapla other c	ins, ministers, or lergy	ם	o	O		O			
f.	Other I profess	-	٥	0	O			٥		
g.	Your s	hip's leaders	О	O	П		П	J		
h.	Other print the 1	orofessionals not Navy	٥	o	o	٥		o		

## BBBBINGS

49.	Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK. (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Nervousness or shakiness inside		0	O	О	0
b.	Repeated unpleasant thoughts	0			0	O
c.	Faintness or dizziness	П	O	O	О	Ø
d.	Loss of sexual interest or pleasure	a	0	٥	0	٥
e.	Feeling critical of others	ø	O	IJ	О	Ø
f.	The idea that someone else can control your thoughts		o	a	0	O
g.	Feeling others are to blame for most of your troubles		О			
h.	Trouble remembering things	0	0	0	0	
i.	Feeling easily annoyed or irritated	O				
j.	Pains in heart or chest				0	0
k.	Feeling atraid in open spaces	□	0		П	ø
1.	Feeling low in energy or slowed down		٥			0
m.	Thoughts of ending your life			٥	۵	
n.	Feeling that most people cannot be trusted	_	0	0	o	o
0.	Poor appetite		O		П	O
p.	Crying easily	0	0		О	٥
q.	Suddenly scared for no reason	O			O	٥

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
r.	Temper outbursts that you could not control	a		o	0	a
S.	Feeling lonely even when you are with people	a				D
t.	Feeling blocked in getting things done		0		0	
u.	Feeling lonely	П	П	О	۵	
v.	Feeling blue	O	0	0	0	0
w.	Worrying too much about things	О				
x.	Feeling no interest in things	0		0	0	
у.	Feeling fearful		0	ø		
z.	Your feelings are easily hurt					
aa.	Feeling others do not understand you or are unsympathetic	D		n	O	D
bb.	Feeling that people are unfriendly or dislike you		0		0	0
ec.	Feeling inferior to others	O	D		П	П
dd.	Nausea or upset stomach					ם
ce.	Feeling that you are watched or talked about by others		D	D		D
ff.	Trouble falling asleep				a	
gg.	Having to check and double-check what you do				O	
hh.	Difficulty making decisions	o		0	a	

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
ii.	Feeling afraid to travel	O	O	О	O	O
jj.	Trouble getting your breath		0	О	0	0
kk.	Hot or cold spells					O
11.	Having to avoid certain things, places or activities because they frighten you	0	0	0		0
mm.	Your mind going blank	O	ø	О	O	□
nn.	Numbness or tingling in parts of your body		0			. 0
00.	The idea that you should be punished for your sins					0
pp.	Feeling hopeless about the future	О	0	٥	0	О
qq.	Trouble concentrating	8	Ø	O	O	O
rr.	Feeling weak in parts of your body	a		٥	o	0
SS.	Feeling tense or keyed up	Ø	O	Ø	O	
tt.	Thoughts of death or dying	0	0		0	0
uu.	Having urges to beat, injure or harm someone	ø		٥	O	ם
vv.	Sleep that is restless or disturbed					
ww.	Having urges to break or smash things	ŋ	Ð	O	Ð	
XX.	Feeling very self-conscious with others	σ	0	٥		0
уу.	Feeling uneasy in crowds	O	٥		0	
ZZ.	Never feeling close to another person	o l				

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much <b>DISCOMFORT</b> that problem has caused you <b>DURING THE PAST WEEK</b> .  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
aaa.	Spells of terror or panic	0	Ø	IJ	O	O
bbb.	Getting into frequent arguments				O	O
ecc.	Feeling nervous when you are alone	ø		D		ß
ddd.	Others not giving you proper credit for your achievements	0		٥	0	٥
eee.	Feeling so restless you couldn't sit still	٥	O	□		D
fff.	Feelings of worthlessness	0	0			0.
ggg.	Feeling that people will take advantage of you if you let them	D				O
hhh.	Thoughts and images of a frightening nature	o		0		٥
iii.	Feelings of guilt		O	O	O	ø
jjj.	The idea that something is wrong with your mind		0	٥	0	0
kkk.	Spending less time with peers and friends	П	ø	П		

# WOMENS SECTION

50.	Reproductive system health	a. Did you have this condition during the past 90 days? (Check one box on each line)			b. If yes, did you first experience the condition, or did it get worse, during the past 90 days? (Check one box on each line if answer to the condition is "yes")			
	Condition	No (1)	Yes (2)	Not sure (9)	No (1)	Yes (2)	Not sure (9)	
a.	Bleeding between periods	D	Ø	O	J	O		
b.	Cramps or pain during menstrual period requiring medication or time off work	0	0		0	0	o	
c.	Cramps or pain during menstrual period not requiring medication or time off work.	O	O	ם	O	Ø		
d	Excessive frequency of periods (time between periods too short)		0	0	٥			
e.	Heavy periods (excessive menstrual flow)	D	П		П	ŋ	ø	
f.	Period lasting longer than 1 week	a	a	0	٥	0	0	
g.	Scanty menstrual flow	O	Ø	O	O		O	
h.	Abdominal pain (from known cysts)	o		0			0	
i.	Abdominal pain (from known endometriosis)	Ð	D	П	J	D	O	
j.	Abdominal pain (from other or unknown cause)	۵			٥		o	
k.	Discharge from breast	O	٥	٥	О		O	
1.	Breast lump				0		0	

51.	Did a a.	•	ne conditions listed above (a through l) require you to:  2 or more hours off work during the past 90 days? (Check one box)  5 2 Tes (Specify which condition(s):)
	b.	Miss	1 or more days of work during the past 90 days? (Check one box)  1 or more days of work during the past 90 days? (Check one box)  2  Yes (Specify which condition(s):)
52.	Mens	trual pe	riods
	a.		ng the past 12 months have you had regular menstrual periods?  k one box)  No (Please explain):
		2 🗆	Yes, about 1 per month.  Yes, but not 1 per month. (Please explain):
	b.	If you box b	n missed one or more periods during the past 12 months, please check one elow:
		1 🗇	I missed my period approximately time(s) during the <b>past 12</b> months.
		0 🗖	I had no periods at all during the past 12 months.
		9 🗇	I'm not sure of the number of periods I missed during the past 12 months.
53.		ig the <b>p</b> k one b	ast 90 days have you taken birth control pills to regulate your periods?
	1 🗆 N	o	2 ☐ Yes
54.	1 🗖	No	ast 90 days have you taken replacement estrogens? (Check one box)
	2 🗖		hormone pills.
	3 🗖	Yes,	hormone creams or other hormone preparations.

55.	Did you have any of the following conditions during the past 90 days? (Please check									
	either	either "no" or "yes" for every condition listed)								
	a.	1 🗆 No	2 🗖 Yes	Urinary tract infection						
	b.	1 🗖 No	2 🗖 Yes	Vaginal rash, discharge, or other vaginal disord						
		except yeast infection,	not inc	luding	sexually-					
				transmitted diseases						
	c.	1 □ No	2 ☐ Yes	Yeast infection						
	d.	1 □ No	2 ☐ Yes	Pelvic or lower abdomi	inal pa	ın				
	e.	1 □ No	2 ☐ Yes	Gonorrhea						
	f.	1 □ No	2 ☐ Yes	Other sexually-transmit						
	g.	1 🗖 No	2 🗖 Yes	Other genitourinary sys			n			
				(Please specify):						
56.	Did ar	ny of the co	nditions listed a	bove (a through g) require	vou to	٠.				
50.	a.									
	a.	a. Take 2 or more hours off from work during the past 90 days?  (Check one box)								
		1 D No								
	2  Yes (Specify which condition(s)):									
	b. Miss 1 or more days of work during the past 90 days? (Check one box)									
		1 □ No								
		2 ☐ Yes (S	pecify which co	ndition(s)):						
							70 1			
57.	Has a doctor ever told you that you had any of the					If yes, what				
	follow	ring?					was your age in years at			
				TO 1 1 ((T) 1)	No	Yes	first			
	(Please check one box on each line. If you check "Yes,"					(2)	diagnosis?			
201002000000000000000000000000000000000	please	write your	age at first diag	gnosis.)	(1)	` ′	8			
a.	Abnor	mal Pap sm	ear (test for cer	vical cancer)		O				
b.	Breast	lump diagr	osed as benign	breast cyst or fibrocystic						
0.		Breast lump diagnosed as benign breast cyst or fibrocystic disease ( <i>Please specify</i> ):								
		-F 33 /								
c.	Benig	n breast lum	p, exact diagno	sis unknown	O	О				
**********			•							
d.	Breast cancer				السا					

## PREGNANCY

<b>5</b> 8.	How many times have you been pregnant? (Check one box)						
	0 🗖	Never (Please skip to question 62)					
	1 🗇	I have been pregnant times.					
<b>5</b> 9.	Are y	you pregnant now? (Check one box)					
	1 🗖	No					
	2 🗖	Yes					
	9 🗖	Not sure					
60.	Recei	nt pregnancies					
	a.	Have you been pregnant during the past 12 months? (Check one box)					
		1 □ No (Skip to question 62)					
		2 □ Yes					
	b.	How many times have you been pregnant during the past 12 months?					
		times.					
	c.	Were you serving aboard this ship when you were informed you were pregnant?					
		1 □ No (Skip to question 62)					
		2 □ Yes					
	d.	How many weeks did you serve aboard this ship after your command was					
		notified of your pregnancy? weeks.					
	e.	Were you transferred ashore due to pregnancy?					
		1 □ No (Skip to question 62)					
		2 □ Yes					
	f.	How many weeks pregnant were you when transferred off this ship?					
		weeks.					

Please provide the following information in chronological order for the **past 12** months. For multiple outcomes, make each a separate entry (e.g., two entries for twins). Indicate only one "outcome" per pregnancy. If you are uncertain of a detail, provide your best estimate.

provide	your best estimate.			·		
Pregnancy	Outcome	What was the approximate date of this outcome?	Were you in the Navy at the time?	1	was your duty ype at the time: at out- come	Was this pregnancy planned?
a. Most recent	☐ 1 Live Birth ☐ 2 Stillbirth ☐ 3 Miscarriage/ spontaneous abortion ☐ 4 Ectopic pregnancy ☐ 5 Elective induced abortion	Year 19 Month 	□ 1 No □ 2 Yes	□ I □ 2 □ 3 □ 4	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes
b. Prior pregnancy (or twin)	☐ 1 Live Birth ☐ 2 Stillbirth ☐ 3 Miscarriage/ spontaneous abortion ☐ 4 Ectopic pregnancy ☐ 5 Elective induced abortion	Year 19 Month	□ 1 No □ 2 Yes	□ 1 □ 2 □ 3	☐ 1 Afloat ☐ 2 Aviation SQD ☐ 3 Industrial type shore ☐ 4 Other shore	☐ 1 No ☐ 2 Yes Were you using birth control? ☐ 1 No ☐ 2 Yes

62.	What is your best estimate of the likelihood that you will become pregnant in the next
	12 months?
	(Fill in a number between 0 and 100, with 0 representing no chance that the event will
	occur, and 100 representing that the event definitely will occur): percent

### BAMIBY PLANNING

63.	Please rate your agreement or disagreement with each of the following statements. (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	I hope to become pregnant during the next 12 months.	O	٥			J
b.	I probably will become pregnant during the next 12 months.		0	0		a
c.	My partner objects to use of birth control measures.	O			O	D
d.	Using birth control is inconvenient.			□	0	0
e.	I would not use birth control pills because I am concerned about possible health effects					
f.	A sexually active woman who uses an intrauterine device (IUD) is not very likely to become pregnant.	0	0	0	٥	a
g.	A sexually active woman who uses a diaphragm and contraceptive gel is not very likely to become pregnant.	٥	П	П		D
h.	A sexually active woman whose partner always uses a condom is not very likely to become pregnant.	0			0	a

# OB/GYN AVAILABILITY

64.	Approximately how many months or days ago was your most recent:  (Fill in number of months or days for each item)		Number of months	Number of days (if less than 1 month)				
a.	Pap s	mear (test for cervical cancer)?						
b.	Pelvi	c examination?						
c.	Breas	t examination by a physician or nurse?						
65.	Pre-da.	Pre-deployment OB-GYN visit  a. Have you deployed at sea for 30 days or more at any time during the past 12 months?  1  No (Skip to Comments and Suggestions on the last page) 2  Yes						
	b.	Preceding deployment, did you request a pre-deployment appointment with a gynecologist or obstetrician from a Navy medical facility?  1  No (Skip to Comments and Suggestions on the last page)  2  Yes						
	c. If yes, print below the month and year you requested the appointment: , 19 Month Year							
	d.	<ul> <li>d. Were you given a gynecological or obstetrical appointment? (Check one box)</li> <li>1 □ No (Skip to Comments and Suggestions on the last page)</li> <li>2 □ Yes</li> </ul>						
	e. Were you able to keep the appointment before deployment? (Check one box)  1  No 2  Yes							

# DEMOGRAPHIC DATA II

66.	What is your race? (Check one box)  1 □ White  2 □ Black/African-American  3 □ Asian/Pacific Islander  4 □ Native American  9 □ Other (please specify):
67.	What is the highest level of education you have completed: (Check one box on each)  □ Some high school  □ Graduate equivalency degree (GED)  □ High school graduate  □ Trade or technical school graduate  □ Some college or AA degree  □ 4-year college degree  □ Graduate or professional degree
68.	What is your approximate total number of years and months on <u>active duty</u> (Navy or other branch of service)?
	years and months
69.	What is the approximate total time you have served aboard <u>Navy ships</u> counting all time on all ships on which you served?
	years and months
70.	What is the approximate total time you have served aboard a Navy salvage ship?
	years and months
	FEIGHT 800 RECOVERY OPERATIONS
71.	Please describe your main duties aboard ship during TWA Flight 800 recovery operations. (Please check all that apply)  10  Diver  10  Operate or maintain diving equipment  10  Operate or maintain electrical systems  10  Operate or maintain hoist or other mechanical systems on deck  10  Operate or maintain main propulsion system

71.	Continue Please describe your main duties aboard ship during TWA Flight 800 recovery operations. (Please check all that apply)  06  Operate or maintain radar, sonar, or radio communications equipment  07  Operate or maintain other electronic equipment  08  Perform administrative or clerical services  09  Perform general or hull maintenance duties mainly topside  10  Perform general or hull maintenance duties mainly below  11  Mess management or other services  12  Medical, nursing, or medical corpsman duties  13  Officer duties  99  Other (please describe):						
72.	What date did you firs	st arrive on scen	e of any Flight 800-related recovery operation	ons?			
	Month:	_ Day:	Year: 1996				
73.	What date did you <u>last scene</u> ?	<u>take part</u> in any	y Flight 800-related recovery operations on				
	Month:	Day:	Year: 1996				
74.	Before Flight 800 reco	-	, have you ever participated in an operation	that			
	1 □ No 2 □ Yes						
75.	While you were on sceed doctor?	<u>ene,</u> approximate	ely how many times did you visit sick call o	r a			
	times						
76.	While you were <u>in port</u> during the period of recovery operations, approximately how many times did you visit sick call or a doctor?						
	times						
77.	•		period of recovery operations, but not on so u visit sick call or a doctor?	cene,			
	times						

### DISSOCIATIVE EXPERIENCES QUESTIONS

78. INSTRUCTIONS: Please complete the items below by checking the box of the choice that best describes your experiences and reactions DURING THE RECOVERY OPERATION AND IMMEDIATELY AFTERWARD. If an item does not apply to your experience, please check "not at all true."

		Not at all true (1)	Slightly true (2)	Somewhat true (3)	Very true (4)	Extremely true (5)
a.	I had moments of losing track of what was going on I "blanked out" or "spaced out" or in some way felt that I was not part of what was going on.	O		0		
b.	I found that I was on "automatic pilot" I ended up doing things that I later realized I hadn't actively decided to do.	o	0	0	0	0
c.	My sense of time changed — things seemed to be happening in slow motion.	ø	٥			
d.	What was happening seemed unreal to me, like I was in a dream or watching a movie or play.	0	٥	0	a	0
e.	I felt as though I were a spectator watching what was happening to me, as if I were floating above the scene or observing it as an outsider			ū		O

78. -- Continued -- INSTRUCTIONS: Please complete the items below by checking the box of the choice that best describes your experiences and reactions DURING THE RECOVERY OPERATION AND IMMEDIATELY AFTERWARD. If an item does not apply to your experience, please check "not at all true."

		Not at all true (1)	Slightly true (2)	Somewhat true (3)	Very true (4)	Extremely true (5)
f.	There were moments when my sense of my own body seemed distorted or changed. I felt disconnected from my own body, or that it was unusually large or small.	٥	a	0	σ	O
g.	I felt as though things that were actually happening to others were happening to me — like I was being trapped when I really wasn't.	0	0			
h.	I was surprised to find out afterwards that a lot of things had happened at the time that I was not aware of, especially things I ordinarily would have noticed.		0	0	_	
i.	I felt confused, that is, there were moments when I had difficulty making sense of what was happening.					
j.	I felt disoriented, that is, there were moments when I felt uncertain about where I was or what time it was.	0	O		O	O

### IMPACION BALENII SOAILE

79. INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then check the box that best indicates how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the recovery operation, and how much you were distressed or bothered by these difficulties.

		Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
a.	Any reminder brought back feelings about it.					
b.	I had trouble staying asleep.		0	О		٥
c.	Other things kept making me think about it	٥				
d.	I felt irritable and angry.	_			ם	
e.	I avoided letting myself get upset when I thought about it or was reminded of it.					
f.	I thought about it when I didn't mean to.			σ	0	Ø
g.	I felt as if it hadn't happened or wasn't real.					J
h.	I stayed away from reminders about it.	<u> </u>	0	_		
i.	Pictures about it popped into my mind.					
j	I was jumpy and easily startled.					0
k.	I tried not to think about it.					
1.	I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	0	0		0

79. — Continued — INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then check the box that best indicates how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the recovery operation, and how much you were distressed or bothered by these difficulties.

		Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
m.	My feelings about it were kind of numb.		J			
n.	I found myself acting or feeling like I was back at that time.		0	0	0	a
0.	I had trouble falling asleep.	O	O			
p.	I had waves of strong feelings about it.	٥	٥	o		o
q.	I tried to remove it from my memory.	٥	J			П
r.	I had trouble concentrating.	0	0		ם	
S.	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart	П		ח		
t.	I had dreams about it.	0				
u.	I felt watchful and on-guard.	П				O
v.	I tried not to talk about it.					

80.	The following items refer to your experiences related to TWA Flight 800 recovery operations.							
		Never (1)	Occasi (2	-	Often (3)	Most of the time (4)	All of the time (5)	
a.	Do you keep remembering this event when you don't want to?			O	O	J		
b.	Do you have dreams or nightmares about this event?	a	a			a	0	
c.	Do you ever suddenly act or feel as though part of this event is happening again, even though it isn't?						D	
81.	81. Previous to TWA Flight 800 recovery operations, did any of the following ever happen to you?							
Bein	Being			Yes (2)		Approximately what year(s did this happen?		
a.	in combat?			O		19		
b.	assaulted or threatened with a w	eapon?		0		19		
c.	almost killed or badly hurt?		О	o		19		
d.	Seeing someone being hurt or killed?	,		0		19		
e	Other terrible experience (Specify)		0	٥		19		
82.	Do you keep remembering any of the 1 □ No 2 □ Yes 9 □ Not sure	e above e	vents e	ven whe	en you c	don't wan	t to?	
83.	Do you keep having dreams or nights  1 □ No  2 □ Yes  9 □ Not sure	mares abo	out it?					

84.	During TWA Flight 800 recovery operations were you exposed to any of the factors listed below? (Direct contact means touching with or without gloves.)			If answer is yes, please fill in the circles below:				
	Exposure	No (1)	Yes (2)	What was the usual number of hours per day that you had this exposure or did this activity?	What was the usual number of days per week that you had this exposure or did this activity?			
a.	Skin contact with jet fuel from Flight 800?	o	o	@ <b>①②③④</b> ⑤⑥⑦⑧⑨⑩+	<b>0</b> 0234567			
b.	Inhaling vapor from jet fuel from Flight 800?	0	0	0003345678900+	00234567			
C.	Direct contact with (touching) intact bodies?	o	۵	00234567890+	00234567			
d.	Direct contact with (touching) body parts?	o	٥	@OO3456789@+	00234567			
e.	Direct contact with (touching) blood?	O		@023436789@+	00234567			
f.	Taking part in activities where human remains were visible but you did not have direct contact with them?	٥	٥	@①②③④⑤⑥⑦®⑨⑩+	<b>00234567</b>			
đị.	Diving underwater?	O		What was your usual number of dives per day?  ①①②③④⑤⑦⑧⑨⑩+	How many days per week did you usually dive?			

	· · · · · · · · · · · · · · · · · · ·	 
☐ Don't know		
Why did this bother you most?		
Why did this bother you most?		 

COMMENTS AND SUGGESTIONS					
Additional comments you would like to add:					
THANK YOU!					

Please return to your shipboard coordinator or:

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

### APPENDIX C.10

TWA Flight 800 Recovery Operations, Form MB G

# U. S. NAVY SHIPBOARD HEALTH FOLLOW-UP SURVEY



# NAVAL HEALTH RESEARCH CENTER SAN DIEGO

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THIS COVER SHEET AND PLACE IN THE SMALL ENVELOPE PROVIDED

See Inside for Information to Participants and Privacy Act Statement

Form MB, v.1.5, 09 Sep 96

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

- I am being asked to continue to volunteer participating in a research study entitled, "Health Aboard Navy Ships: A Comprehensive Health and Readiness Research Project." The purpose of this study is to enhance basic medical knowledge concerning the provision of medical care and health promotion. I am being asked to participate now by filling out a questionnaire which will take approximately 45 to 60 minutes to complete. In about one year, I may be asked to fill out a similar questionnaire, if I am still active-duty.
- 2. I understand that my continuing participation in this study is completely voluntary. If I do not choose to participate there are no penalties, and I will not lose any benefits to which I am otherwise entitled. I may discontinue my participation in this study at any time I choose without fear of penalty or loss of benefits to which I am otherwise entitled. I do not need to answer any questions on this questionnaire that make me feel uncomfortable or embarrassed.
- 3. The benefit that I may expect from my participation in this research study is the knowledge that I will be helping the Navy to provide the best possible medical services to men and women serving aboard. Navy ships. There is no direct personal benefit to me from participation in this research study.
- 4. The investigators believe that there are no direct physical or psychological risks to me as a participant in this research study, with the possible exception of a very unlikely accidental breach of confidentiality. In the event that confidentiality is breached, the questionnaire with personal identifiers contains no questions which would provide legally actionable items under Military or Civil law. However, I could experience some embarrassment or potential psychological stress if confidentiality is breached. Specific safeguards to protect my confidentiality are outlined in paragraph 5.
- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence: I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- If I have questions about this research study I should contact the principal investigator, Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881; DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers. I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
- 7. I have been informed that Dr. Frank C. Garland is responsible for the storage of my consent form and the research records related to my participation in this study. These records are stored at the Naval Health Research Center. San Diego, CA 92186-5122.

8.

Permanent address

I fully understand the above statements. By my signature below, I give my voluntary informed consent to participate

_			
Date:			199
	Month	Day	Year
		_	
		Month	

THIS PAGE TO BE COMPLETED BY ALL STUDY PARTICIPANTS.

City

Zip Code

TO PROTECT YOUR CONFIDENTIALITY, REMOVE THE COVER SHEET AND THIS PAGE, AND PLACE THESE TWO PAGES IN THE SMALL ENVELOPE PROVIDED. A COPY OF THIS PAGE IS INCLUDED FOR YOU TO KEEP.

### **Information to Participants**

You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

#### **Privacy Act Statement**

- 1. Authority. 5 USC 301, 10 USC 1071. OPNAV Control Symbol 6000-13C.
- 2. Purpose. Medical research information will be collected to enhance basic medical knowledge concerning medical care and health promotion. 3. Routine use. Medical research information will be used in statistical analyses by the Departments of the Navy, Defense, and other U.S. Government agencies, provided this is compatible with the purpose for which information was collected. Use of the information may be granted to non-Government agencies by the Chief, Bureau of Medicine and Surgery, in accordance with the provisions of the Freedom of Information Act. 4. Voluntary disclosure. I understand that all information derived from the study will be retained at the Naval Health Research Center, San Diego, and that my anonymity will be maintained. I voluntarily agree to its disclosure to agencies or individuals identified in the preceding paragraph. I understand that my provision of information is voluntary, and that I am free to discontinue filling out the questionnaire and withdraw from the study at any time without prejudice or loss of medical treatment or privileges to which I would otherwise be entitled.

# Voluntary Consent to Participate in the U.S. Navy Shipboard Health Follow-Up Survey

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- 5. Confidentiality during this research study will be protected by restricting access to all data collected to personnel working on this research project who have taken an oath of confidentiality. Representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects in research. The confidentiality of the information related to my participation in this research study will be protected at all times by use of an arbitrary number to identify me. I also understand that none of my responses will become a part of my medical or military record and that no information that might identify me personally will be included in results from reports of this study. All data and medical information obtained about me as an individual will be considered privileged and held in confidence; I will not be identified in any presentation of the results. Complete confidentiality cannot be promised, particularly to subjects who are military personnel, because information bearing on my health may be required to be reported to appropriate medical or command authorities.
- 6. If I have questions about this research study I should contact the principal investigator. Dr. Frank C. Garland at the Naval Health Research Center (NHRC), San Diego, CA 92186-5122, phone (619) 553-6881. DSN 553-6881. If I have questions about the ethical aspects of this study, my rights as a volunteer, or any concerns relating to protection of research volunteers, I can contact Dr. Tamsin Kelly at NHRC, phone (619) 553-8443; DSN 553-8443. Additionally, I may contact Dr. Stephanie Brodine at NHRC if I have any questions about medical aspects of this study. Dr. Brodine may be contacted at NHRC, phone (619) 553-7809; DSN 553-7809.
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- 8. I fully understand the above statements.

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You are being asked to voluntarily complete this follow-up survey giving candid responses and opinions about health-related issues and to continue in a study that will involve one or more additional questionnaires. Your answers are for research use only and will be kept strictly confidential. Data will be reported so that no individual participant can be identified and the information you provided will not become part of anyone's official records. If you have any questions about this survey, please contact Dr. Frank C. Garland, Naval Health Research Center, San Diego, CA 92186-5122/DSN: 553-6881; Commercial (619) 553-6881.

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Loda	y's date:	Mont	th:	Day:	Year: 199
What 1	t is your current Never marrie Married Separated Divorced Widowed		? (Check on	ae box)	
What	t is your pay gra	de? (Circle or	ıe)		
	<u>Enlisted</u>	Warrant Officer	<u>Offi</u>	cer	
If you How Num	E-7 E-8 E-9 u are Navy enlis	isted, what is yurrently are in y	your M.O.S. your work graber of wome	number? oup?	I BT, HM, ASM)? _
What 1	is your departn Administration Air Communication Deck Engineering	n	one box) 6 [ 7 [ 8 [ 10 [	Opera React Repair Suppl	ir

9.	If you are currently aboard ship, what is your ship's current status? ( <i>Check one box</i> )							
	iΩ	In home port	ţ	3 🗖	In port other than home port			
	2 🗍	At sea		4 🗖	In shipyard			
				9 🗖	Other (Please specify):			
10.	Deplo	oyment status						
	a.	-	imes have you	deployed	d during the past 12 months?			
					deployment is defined as:			
		-	luled at sea for	30 days	or more")			
		Tim	es					
	b.	Are you curr (Check one b	ently deployed pox)	(30 day	rs or more)?			
		No (Please skip to question 11) 2□ Yes						
	c.		d you begin this _ Day:					
11.	Llovio	von doplovad	in the Dognie or	oo durin	og the post 12 months? (Check over how)			
11.	1 <b>1</b>	No	ili ule Bosilia ai	ca dulii	ng the past 12 months? (Check one box)			
	2 🗍	Yes						
12.			hen your ship i		r home port? (Check one box)			
	10	Aboard ship		3 🗖	BEQ/BOQ			
	2 🗖	Navy housing	g	9 🗖	Other			
			# E # 6 / 6 # 6 6		NDITIONS			
					N			
13.	Have	you had any of	these health co	nditions	s during the past 30 days whether or not it			
	resulte	ed in a visit to	sick call or a he	alth car	e provider?			
	(Pleas		"no" or "yes"		•			
	a.	1 □ No	2 ☐ Yes		non cold symptoms			
	b.	1 🗖 No	2 ☐ Yes	Dizzir				
	c. d.	1 □ No 1 □ No	2 ☐ Yes 2 ☐ Yes	Chills Cough				
	e.	1 🗆 No	2 ☐ Yes	Sore the				
	f.	1 🗆 No	2 ☐ Yes	Fever	and the same of th			
	g.	1 □ No	2 ☐ Yes	Flu				
	h.	1 🗆 No	2 ☐ Yes	Diarrh	ea lasting at least 3 days			
	i.	1 □ No	2□ Yes		ch problems			

13.	Coi	ntinued Hav	ve you had any o	of these health conditions during the past 30 days
	whet	t <mark>her or not</mark> it	resulted in a vis	sit to sick call or a health care provider?
	(Plea	ise check eith	ier "no" or "yes	" for every condition)
	j.	1 🗖 No	2 🗆 Yes	Constipation
	k.	1 🗖 No	2 ☐ Yes	Indigestion
	1.	1 🗆 No	2 🗖 Yes	Nausea or vomiting
	m.	1 🗖 No	2 🗖 Yes	Sinus trouble
	n.	1 🗆 No	2 🗖 Yes	Hay fever
	о.	1 🗖 No	2 🗖 Yes	Shortness of breath
	p.	1 🗖 No	2 ☐ Yes	Hoarseness
	q.	1 🗖 No	2 🗖 Yes	Skin problems
	r.	1 🗖 No	2□ Yes	Muscle sprain or strain
	s.	1 🗖 No	2 ☐ Yes	Back problems
	t.	1 🗖 No	2□ Yes	Hearing problems
	u.	1 🗖 No	2□ Yes	Irritated eyes
	v.	1 🗖 No	2□ Yes	Trouble seeing with one or both eyes even if
				wearing glasses or contacts
	w.	1 🗖 No	2 ☐ Yes	Pain in stomach or abdominal area
	x.	1 🗖 No	2□ Yes	Heat stress or heat stroke
	у.	1 🗖 No	2 ☐ Yes	Psychological condition(s) severe enough to
				interfere with daily activities
	z.	1 □ No	2□ Yes	Personal problem(s) severe enough to interfere with
				daily activities
	aa.	1 🗆 No	2 ☐ Yes	Other condition or injury
				Please specify:
	bb.	1 🗖 No	2 ☐ Yes	Headache:
		If yes, was	your headache:	(Please check either "no" or "yes" for
		every cond	· <del>-</del>	
		1 □ No	2 ☐ Yes	Pulsating or throbbing
		1 🗖 No	2 🗖 Yes	One-sided for at least some portion of the headache
				(can be either right or left)
		1 🗖 No	2 🗖 Yes	Severe enough to cause you to stop or decrease your
				activities
		1 🗆 No	2 🗖 Yes	Made worse by physical activity
		Was your l	headache accom	panied by:
		1 □ No	2 🗖 Yes	Visual disturbances
		1 🗆 No	2 🗖 Yes	Numbness or tingling
		1 🗖 No	2 🗖 Yes	Sensitivity to noise
		1 🗖 No	2 🗖 Yes	Sensitivity to light
		1 🗖 No	2 🗖 Yes	Nausea or vomiting

14.	health care provider not on this ship? (Please check either "no" or "yes" for every						
		dition)	<b>~</b> ***	0.11	•	•.•	
	a.	1 🗆 No	2 ☐ Yes	Cold or acute n		igitis	
	b.	1 □ No	2 ☐ Yes	Sore throat, vira	al		
	c.	1 □ No	2 TYes	Cough, viral			
	d.	1 🗖 No	2 ☐ Yes	Flu			
15.			days have you of the reasons	been unable to per below?	form your	military	duties for 1 or
	(Plea	ase check eithe	er "no" or "yes	s" for every condition	on)		
	a.	1 🗖 No	2 🗖 Yes	Health problem			
	b.	1 🗖 No	2 🗖 Yes	Emotional prob	lem		
	c.	1 🗆 No	2 🗖 Yes	Personal proble	m		
	d.	1 🗖 No	2 🗖 Yes	Family problem	l		
	e.	1 □ No	2 ☐ Yes	Other			
16.			months, has a			If yes, what was	
		-	f the following?			your age in	
			ne. If you check	No	Yes	years at first	
***************************************	write	e your age at fi	rsi aiagnosis)		(1)	(2)	diagnosis?
a.	Asth	ma			0		
b.	Mig	raine headache	;				
c.	Anei	nia			O		
d.	Depr	ession				0	
e,	Gone	orrhea			О	O	
f.	Syph	nilis				٥	
g.	Chla	mydia				ø	
h.	Urin	ary tract infect	ion				
i.	Kidn	ey infection			О		
j.	Hern	ia (other than l	hiatal)		٥		
k.	Anoi	exia or bulimi	a		a		
1.	Нера	atitis (Circle ty	pe) A B	С	0		

17.	provi	ng the past 30 days did you visit sick call, a medider to obtain care for yourself for any of the followand fill in the number of visits for each reason.)  Acute physical illness Chronic physical illness, Acute injury Old or chronic injury Health maintenance or preventive screening Psychological or emotional condition Other	No. of visits: ①②	Check as many as  2345 or more
18.	your:	oximately how many months or days ago was in number of months or days for each item)	Number of months	Number of days (If less than 1 month)
a.	Most	recent visit to a medical doctor?		
b.	(Plea	recent visit to another health care professional? se specify type of provider, e.g., psychologist, st, nurse-practitioner):		
c.	Most	recent visit to a hospital corpsman?		
		HFESTYLE		
19.	Have 1 □ 2 □	you smoked at least 100 cigarettes in your entire No (Please skip to question 22) Yes	re life? (Check o	ne box)
20.	On ho 0	None 1-4 days 5-9 days 10-14 days 15-19 days 20-24 days Every day Not sure	arettes? (Check of	ne box)

21.	On average how many cigarettes did you smoke per day during the past 30 days?	
	(Check one box)	
	o □ None	
	1 ☐ Fewer than 1 cigarette a day, on the average	
	2 ☐ 1-4 cigarettes	
	3 ☐ 5-9 cigarettes	
	4 □ 10-19 cigarettes	
	5 □ 20-29 cigarettes	
	6 □ 30-39 cigarettes	
	7 □ 40-49 cigarettes	
	8 ☐ 50 or more cigarettes	
	9 □ Not sure	
22.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour	or
	more per day in your immediate work area? (Check one box)	
	1 □ No	
	2 ☐ Yes	
	9 □ Not sure	
23.	During the past 30 days, have you been exposed to tobacco smoke for one (1) hour more per day in your sleeping area or other non-working area? (Check one box)	or
	1 D No	
	2 □ Yes	
	9  Not sure	
24.	During the past 30 days, have you used any other form of tobacco? (Check all that	
	apply)	
	0 None	
	1 Cigars	
	2 Pipe	
	3 ☐ Smokeless tobacco (snuff or chew)	
25.	During the past 7 days, on how many days did you have any alcoholic beverages?	
	(Fill in one circle)	
	(If you filled in 0, please skip to question 28)	
26.	On the days you drank any alcoholic beverage during the past 7 days, how many	
	drinks did you usually have <b>per day</b> ? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) ( <i>Fill in one circle</i> )	
	1 2 3 4 5 6 7 8 9 10  If more, please give no.:	
	U & O & O O O O O W O II more, prease give no	

27.	During the past 7 days, what was the largest number of alcoholic drinks you had in 1 day? (Consider a single shot, single mixed drink, glass of wine, or can of beer as 1 drink.) (Fill in one circle)  1 2 3 4 5 6 7 8 9 10
28.	In an average 7 days, on how many days do you engage in exercise or sports that lasts at least 20 minutes without stopping, and that is hard enough to make you breathe heavier and your heart beat faster?: (Fill in one circle)  ① ① ② ③ ④ ⑤ ⑥ ⑦ days
29.	In an average 7 days, on how many days do you engage in work that is hard enough to make you breathe heavier and your heart beat faster that lasts at least 20 minutes without stopping?: (Fill in one circle)  (1) (2) (3) (4) (5) (6) (7) days
30.	My current:  a. Weight is pounds.  b. Height is feet and inches.
31.	Calcium intake  a. Have you taken any calcium supplements during the past 30 days? (Check one box)  1  No 2  Yes
	b. If yes, how many milligrams of calcium do you take per day?  milligrams.
	<ul> <li>c. On the average, how many glasses do you usually drink per day of: (Fill in one circle)</li> <li>1. Skim milk</li></ul>

32.	~ 1 NT / '	. •
47	General Nutri	tion
17.	TICHCIAL INTHI	1 14 14 1

	During the past <b>7 days</b> , approximately how many times did you: ( <i>Check one box</i> )	Never (1)	1-3 times per week (2)	4-6 times per week (3)	7 or more times per week (4)
a.	Eat high-fat meats or dairy (e.g., hamburger, hot dogs, steak, bacon, whole milk, cheese, ice cream)	Θ	O		
b.	Eat fried foods (e.g., french fries, fried chicken, fried eggs)	O	0	_	0
C.	Eat refined sugar products (e.g., cakes, pies, cookies, candies)	О	П		
d.	Eat low-fat meats or dairy (e.g., chicken or turkey without skin, low-fat milk, yogurt)	0	o	О	<b>a</b>
e.	Eat "leafy" vegetables (e.g., broccoli, cabbage, greens)				
f.	Eat "starchy" vegetables (e.g., beans, peas, corn, potatoes)	0	σ		0
g.	Eat fruits (e.g., apples, oranges, raisins, dried fruit, melons, bananas)	D		O	
h.	Eat high fiber foods (e.g., whole grain breads, cereals, bran)		0		0

33. During the past 30 days, on the average, how many hours of sleep did you get per 24 hours? (Fill in one circle)

1 2 3 4 5 6 7 8 9 10 hours

34.	O you or your partner currently use  (Please check all that apply)  1 □ Yes, birth control pills  2 □ Yes, condoms or rubbers  3 □ Yes, spermicidal foam or jelly  4 □ Yes, Depo Provera  5 □ Yes, Norplant  6 □ Yes, intrauterine device (IUD)  7 □ Yes, diaphragm  8 □ Yes, other (please specify)  9 □ No, because of a vasectomy of  10 □ No, I am (or my partner is) state  11 □ No, I am not sexually active  12 □ No, I (we) use no method of b	tubal ligat	ion (tube		event preg	gnancy?
35.	The statements below describe attitudes and beliefs that different people might have. Indicate how much you AGREE or DISAGREE with each of the following statements.  (Check one box on each line)	Strongly agree (1)	Agree (2)	Neither agree nor disagree (3)	Disagree (4)	Strongly disagree (5)
a.	The whole idea of birth control is embarrassing to me.		П			
b.	I think it is very important to use birth control after marriage until you have decided to start a family.	٥	_	٥	O	0
c.	I would not have sexual intercourse without using birth control				D	D
d.	I would have sexual intercourse without birth control if my partner wanted me to.	0	J	o	o	٥
e.	Sometimes when a birth control method is not available, I believe you just have to take a chance and hope for good luck to avoid causing a pregnancy.	o	ō	0	Ø	O
f.	If I needed to go to a doctor or clinic for birth control information, I would feel comfortable about it.	0	٥	o	٥	o o

# OUABILY OF LIFE

36.	How do you feel about your: (Check one box on each line)	Terrible (1)	Unhappy (2)	Mostly dissatisfied (3)	Mixed (4)	Mostly satisfied (5)	Pleased (6)	Delighted (7)
a.	Job?		٥	o o	σ	0	0	
b.	Personal life?	О		О	П	O	IJ	
c.	Health and physical condition?	٥	ø	0	0	٥	0	0
d.	Life as a whole?				□	П	ŋ	ø
e.	Family?	0		. 0	0	О		0
f.	(If married) Spouse?	O			ø	ø		J
g.	(If you have children) Children?	0	٥	_		0	0	0
h.	(If you live in military housing ashore) Military housing ashore?							
i.	(If you live aboard ship) Living conditions aboard ship?	0		0		٥	0	0
j.	(If you live in other housing ashore) Other housing ashore?			П		П		
k.	Military pay?		0			0		0

800	138	

37.	How many days during the past 7 days have you: (Check one box on each line)	No days (0)	One day (1)	Two days (2)	Three days	Four days (4)	Five days (5)	Six days (6)	Seven days (7)
a.	Felt you just couldn't get going?		٥	۵	٥		O	٥	O
b.	Felt sad?	0	0	0	0	0	0	0	0
c.	Had trouble getting to sleep or staying asleep?		O	O	J	П			D
d.	Felt that everything was an effort?	٥				٥		٥	O
e.	Felt lonely?	O		9	O	O		O	0
f.	Felt you couldn't shake the blues?		0			0			0
g.	Had trouble keeping your mind on what you were doing?		o	O	O				

### STRESS

38. Think about your whole life over the past 2 weeks. On the whole, how much stress do you think is in your life right now? (*Please check one box*)

None	A little	Moderate	Quite	Extreme
at all	bit	amount	a bit	amount
(1)	(2)	(3)	(4)	(5)
0				0

			,				
39.	Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
a.	Financial matters	O	O		IJ		О
b.	My personal health	0	0	٥	0	٥	
c.	Personal or health matters of a family member	0					0
d.	Being aboard ship	0	a				
e.	Crowded conditions aboard ship	O					
f.	My personal safety aboard ship	0	0		0	٥	0
bý	Maintaining personal hygiene aboard ship						
h.	My lack of privacy aboard ship		0	0	0		
i.	My inability to get enough exercise aboard ship				0	O	
j.	The lack of recreational activities aboard ship	٥	٥	0	O	О	0
k.	My nutrition, the unavailability of desired foods aboard ship	ø			D	٥	
1.	The person I work for (my immediate supervisor)	О	0	o	О	О	O
m.	The people I work with (my peers)	Ø		o	D	O	O
n.	The people who work for me (those I supervise)	0	0	О	0	٥	O
0.	The way things are typically done aboard ship	П	J	D	O	D	

39.	Continued Of the stress that you experience, how much comes from problems or concerns with: (Please check one box on each line)	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)	Not applicable (9)
p.	The people with whom I share living space aboard ship	٥	О	0	О	0	0
q.	My ability to perform my duties	□	O				۵
r.	My career and chances for promotion	0	٥	0	0		0
S.	Being able to stay in the Navy because of downsizing or force reductions						
t.	My relationship with my spouse or boyfriend/girlfriend			0	0	0	0
u.	Breaking up with my spouse or boyfriend/girlfriend because of being aboard ship						
v.	My ability to communicate with my family and friends		0	0	0		0
w.	My use of alcohol		J		0		
x.	My life as a whole	٥	_			٥	
у	(If you have children) My children because of being aboard ship						٥
z.	(If you have children) Discipline of children	0	0	0	0	0	0
aa.	(If you have children) Child- care arrangements	O					

40.	During the <b>past 2 weeks</b> , the stresses listed above have affected my: ( <i>Please check one box on each line</i> )	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Personal life	О	O	D	O	Ð
b.	Performance in my job	0	0		0	٥
41.	During the past 2 weeks, how well have you coped with these stresses?	Not at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
	(Please check one box)					
42.	How many close friends do you have? (			circle)		
	① ① ② ③ ④ ⑤ 6 or more	Ū		·		
43.	How many relatives do you have that yo (0 (1) (2) (3) (4) (5) (6) or more	u feel clo	ose to? (I	Please fill in	one circ	cle)
44.	Altogether, how often do you see these fone box)  1   Almost every day  2   Several times a month  3   Not very often maybe once or a  4   Seldom a few times a year  5   Almost never			ives each n	nonth? (	Check
45.	Are you a member of any clubs or group  1  No 2  Yes	os? (Che	ck one bo	<i>x</i> )		
46.	Do you belong to a church, temple, or or 1 No Yes	ther relig	ious orga	nization? (	Check or	ne box)

47.	Family composition  a. (Unmarried men and women) When you are ashore, do you live with a significant other person in a marital-like relationship? (Check one box)  1 □ No 2 □ Yes								
	b. Are you a parent?  1 □ No 2 □ Yes								
	c. How many children currently live in y		•	r stepchild	•	the age	<u>of 21</u>		
	d. Are you a single presponsibility for household without  1 □ No 2 □ Yes	raising one	e or more ch	-		v	n your		
		SOURC	DES OF H	E   P					
48.	If you experienced a personal problem, how helpful would the following individuals be to you? (Check one box on each line)	Very unhelpful (1)	Somewhat unhelpful (2)	Neutral (3)	Somewhat helpful (4)	Very helpful (5)	Not applicable (9)		
a.	Your family	ם		Ø	O	a	O		
b.	Your friends on board ship	а	a	0	0		0		
C.	Other friends in the Navy	D	О	٥		O			
d.	Other friends not in the Navy	0	o	0	٥	0	٥		
e.	Chaplains, ministers, or other clergy	ס	O			٥			
f.	Other Navy professionals	٥	o	o	0	O	σ		
g.	Your ship's leaders	J	O	O	J	O	П		
h.	Other professionals not in the Navy						0		

## **FEEDINGS**

49.	Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK. (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
a.	Nervousness or shakiness inside	O	О			
b.	Repeated unpleasant thoughts	0				0
c.	Faintness or dizziness	□	ח		П	
d.	Loss of sexual interest or pleasure		0			ם
e.	Feeling critical of others	O	o		ם	ם
f.	The idea that someone else can control your thoughts		_		_	σ
ģ	Feeling others are to blame for most of your troubles		0			
h.	Trouble remembering things	0	0	0		٥
1.	Feeling easily annoyed or irritated	П	O	O	O	O
j.	Pains in heart or chest		0			
k.	Feeling afraid in open spaces	ø	O	O	o	O
1.	Feeling low in energy or slowed down		0		0	
m.	Thoughts of ending your life	ø		O		
n.	Feeling that most people cannot be trusted		o	0	0	
0.	Poor appetite	Ð		Ð	ø	ø
p.	Crying easily			O	0	0
q.	Suddenly scared for no reason	ø		D		

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
r.	Temper outbursts that you could not control	О	О	σ	0	σ
S.	Feeling lonely even when you are with people	۵	O	IJ	ŋ	ø
t.	Feeling blocked in getting things done	o	0		0	
u.	Feeling lonely	ø	ø		П	П
v.	Feeling blue	0	0	0	0	٥
w.	Worrying too much about things	ø	О	П	O	П
x.	Feeling no interest in things		0			σ
y.	Feeling fearful	ø	П	П	O	O
Z.	Your feelings are easily hurt	О		0		σ
aa.	Feeling others do not understand you or are unsympathetic	a	□	D		
bb.	Feeling that people are unfriendly or dislike you	٥	0	О	0	О
cc.	Feeling inferior to others	ø	О		O	П
dd.	Nausea or upset stomach	o	0	0	O	٥
ee.	Feeling that you are watched or talked about by others	ø			О	O
ff.	Trouble falling asleep	0	0	a	0	0
gg.	Having to check and double-check what you do	ם	0	J	ם	O
hh.	Difficulty making decisions	O	0	O		a

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
ii.	Feeling afraid to travel		J	D	П	O
jj.	Trouble getting your breath	0	0		o	o
kk.	Hot or cold spells	П			О	Ø
11.	Having to avoid certain things, places or activities because they frighten you	0	0	0	٥	٥
mm.	Your mind going blank	O	O	O	0	
nn.	Numbness or tingling in parts of your body		0			o
00.	The idea that you should be punished for your sins					
pp.	Feeling hopeless about the future				0	O
qq.	Trouble concentrating					О
rr.	Feeling weak in parts of your body	0	0		0	0
SS.	Feeling tense or keyed up	O	O	0	ס	
tt.	Thoughts of death or dying					
uu.	Having urges to beat, injure or harm someone				D	
vv.	Sleep that is restless or disturbed		0		0	
ww.	Having urges to break or smash things	ø	Œ	D	O	
XX.	Feeling very self-conscious with others	0	O	0		0
уy.	Feeling uneasy in crowds	O	g	Ð	J	
ZZ.	Never feeling close to another person			0	□	

49.	Continued Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select the box that best describes how much DISCOMFORT that problem has caused you DURING THE PAST WEEK.  (Check one box on each line)	None at all (1)	A little bit (2)	Moderate amount (3)	Quite a bit (4)	Extreme amount (5)
aaa.	Spells of terror or panic	D	O		D	
bbb.	Getting into frequent arguments		0			0
ccc.	Feeling nervous when you are alone	П	П			O
ddd.	Others not giving you proper credit for your achievements	0		0	О	0
eee.	Feeling so restless you couldn't sit still		ø			□
fff.	Feelings of worthlessness	_		0		
ggg.	Feeling that people will take advantage of you if you let them	O				
hhh.	Thoughts and images of a frightening nature				0	
iii.	Feelings of guilt	ø	П			Ø
jjj.	The idea that something is wrong with your mind					0
kkk.	Spending less time with peers and friends	□	□		П	□
	DEMOGRAPHI	C DAI	AH			
50.	What is your race? (Check one box)  1 □ White  2 □ Black/African-American  3 □ Asian/Pacific Islander  4 □ Native American  9 □ Other (please specify):					

What is the highest level of education you have completed: (Check one box on each)  1
What is your approximate total number of years and months on <u>active duty</u> (Navy or other branch of service)?
years and months
What is the approximate total time you have served aboard <u>Navy ships</u> counting all time on all ships on which you served?
years and months
What is the approximate total time you have served aboard a Navy salvage ship?
years and months
FLIGHT SOURECOVERY OPERATIONS
Please describe your main duties aboard ship during TWA Flight 800 recovery operations. (Please check all that apply)  10

56.	What date did you first arrive on scene of any Flight 800-related recovery operations?						
	Month: Day: Year: 1996						
57.	What date did you <u>last take part</u> in any Flight 800-related recovery operations <u>on scene</u> ?						
	Month: Day: Year: 1996						
58.	Before Flight 800 recovery operations, have you ever participated in an operation that involved recovery of human remains?  1 □ No 2 □ Yes						
59.	While you were on scene, approximately how many times did you visit sick call or a doctor?						
	times						
60.	While you were <u>in port</u> during the period of recovery operations, approximately how many times did you visit sick call or a doctor?  times						
61.	While you were <u>under way</u> during the period of recovery operations, but not on scene, approximately how many times did you visit sick call or a doctor?						
	times						

## DISSOCIATIVE EXPENIENCES QUESTIONS

62. INSTRUCTIONS: Please complete the items below by checking the box of the choice that best describes your experiences and reactions DURING THE RECOVERY OPERATION AND IMMEDIATELY AFTERWARD. If an item does not apply to your experience, please check "not at all true."

		Not at all true (1)	Slightly true (2)	Somewhat true (3)	Very true (4)	Extremely true (5)
a.	I had moments of losing track of what was going on — I "blanked out" or "spaced out" or in some way felt that I was not part of what was going on.					
b.	I found that I was on "automatic pilot" I ended up doing things that I later realized I hadn't actively decided to do.	٥	o.	О	٥	0
c.	My sense of time changed — things seemed to be happening in slow motion.					
d.	What was happening seemed unreal to me, like I was in a dream or watching a movie or play.	0	0	0	0	0
e.	I felt as though I were a spectator watching what was happening to me, as if I were floating above the scene or observing it as an outsider.	П	П	n		D
f.	There were moments when my sense of my own body seemed distorted or changed. I felt disconnected from my own body, or that it was unusually large or small.	o	0	0	0	О

62. -- Continued -- INSTRUCTIONS: Please complete the items below by checking the box of the choice that best describes your experiences and reactions DURING THE RECOVERY OPERATION AND IMMEDIATELY AFTERWARD. If an item does not apply to your experience, please check "not at all true."

		Not at all true (1)	Slightly true (2)	Somewhat true (3)	Very true (4)	Extremely true (5)
g.	I felt as though things that were actually happening to others were happening to me — like I was being trapped when I really wasn't.		П			0
h.	I was surprised to find out afterwards that a lot of things had happened at the time that I was not aware of, especially things I ordinarily would have noticed.	0	0	0	0	0
i.	I felt confused, that is, there were moments when I had difficulty making sense of what was happening.			П		
j.	I felt disoriented, that is, there were moments when I felt uncertain about where I was or what time it was.	_	0		0	0

## IMIPAOIDOBIBABANAS CARE

63. INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then check the box that best indicates how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the recovery operation, and how much you were distressed or bothered by these difficulties.

_		Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
a.	Any reminder brought back feelings about it				٥	O
b.	I had trouble staying asleep.					
c.	Other things kept making me think about it			۵	П	
d.	I felt irritable and angry.				0	
e.	I avoided letting myself get upset when I thought about it or was reminded of it.					
f.	I thought about it when I didn't mean to.			0	D	0
g.	I felt as if it hadn't happened or wasn't real.					
h.	I stayed away from reminders about it.		0	0	0	
i.	Pictures about it popped into my mind.			0		o
j	I was jumpy and easily startled.	o	0		0	
k.	I tried not to think about it.	O	Ø		0	ø
1.	I was aware that I still had a lot of feelings about it, but I didn't deal with them.			٥		

63. -- Continued -- INSTRUCTIONS: Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then check the box that best indicates how distressing each difficulty has been for you DURING THE PAST SEVEN DAYS with respect to the recovery operation, and how much you were distressed or bothered by these difficulties.

		Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
m.	My feelings about it were kind of numb.	٥	J		O	D
n.	I found myself acting or feeling like I was back at that time.	٥	σ	0	0	0
0.	I had trouble falling asleep.	O	O			O
p.	I had waves of strong feelings about it.		٥	σ	0	0
q.	I tried to remove it from my memory.			O		
r.	I had trouble concentrating.	0		0	0	0
S.	Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.					
t.	I had dreams about it.	0	0		0	0
u.	I felt watchful and on-guard.	O	□		٥	D
v.	I tried not to talk about it.	0	0	0	0	0

64.	The following items refer to your experiences related to TWA Flight 800 recovery operations.						
		Never	Occasi (2	- 1	Often (3)	Most of the time (4)	All of the time (5)
а.	Do you keep remembering this event when you don't want to?	0	C	J	0	٥	П
b.	Do you have dreams or nightmares about this event?	0		]	0	٥	0
C.	Do you ever suddenly act or feel as though part of this event is happening again, even though it isn't?		٥				
65. Previous to TWA Flight 800 recovery operations, did any of the following ever happen to you?							
Being			No (1)	Yes (2)	Appr	Approximately what year(s did this happen?	
a.	in combat?		O	П		19	
b.	assaulted or threatened with a w	eapon?				19	
c.	almost killed or badly hurt?		0	П		19	
d.	Seeing someone being hurt or killed?		o	٥		19	
e.	Other terrible experience (Specify)					19	
66.	Do you keep remembering any of the above events even when you don't want to?  1 □ No  2 □ Yes  9 □ Not sure						
67.	Do you keep having dreams or nightmares about it?  1 □ No 2 □ Yes 9 □ Not sure						

68.	During TWA Flight 800 recovery operations were you exposed to any of the factors listed below? (Direct contact means touching with or without gloves.)			If answer is yes, please fill in the circles below:			
	Exposure	No (1)	Yes (2)	What was the usual number of hours per day that you had this exposure or did this activity?	What was the usual number of days per week that you had this exposure or did this activity?		
a.	Skin contact with jet fuel from Flight 800?		0	<b>0023456789</b> m+	00234367		
b.	Inhaling vapor from jet fuel from Flight 800?		٥	@OO3456789W+	00234567		
C.	Direct contact with (touching) intact bodies?	П	۵	0023456789@+	00234967		
d.	Direct contact with (touching) body parts?	0	٥	@QQ3436789@+	<b>00234367</b>		
e.	Direct contact with (touching) blood?	O	D	00234367890+	00234567		
f.	Taking part in activities where human remains were visible but you did not have direct contact with them?	٥	o	@(1)2(3)4(3)6(7)8(9)(0)+	<b>@①②③④⑤⑥⑦</b>		
ap:	Diving underwater?	D		What was your usual number of dives per day?  ①①②③④⑤⑦⑧⑨响+	How many days per week did you usually dive?		

☐ Don't knov	W		
Why did this	bother you most?		

COMMENTS AND SUGGESTIONS  Additional comments you would like to add:				
	PRINCE OF THE CONTRACT OF THE			
THANK YOU!				

Please return to your shipboard coordinator or:

Naval Health Research Center Code 233 Post Office Box 85122 San Diego, CA 92186-5122 Telephone (619) 553-6881; DSN 553-6881

## DEPARTMENT OF THE ARMY



US ARMY MEDICAL RESEARCH AND MATERIEL COMMAND 504 SCOTT STREET FORT DETRICK, MARYLAND 21702-5012

REPLY TO ATTENTION OF:

MCMR-RMI-S (70-1y)

9 Mar 98

MEMORANDUM FOR Administrator, Defense Technical Information Center, ATTN: DTIC-OCP, Fort Belvoir, VA 22060-6218

SUBJECT: Request Change in Distribution Statement

1. The U.S. Army Medical Research and Materiel Command has reexamined the need for the limitation assigned to technical reports written for the following contracts. Request the limited distribution statement for these contracts be changed to "Approved for public release; distribution unlimited." These reports should be released to the National Technical Information Service.

Contract Number	Accession Document Number
DAMD17-94-J-4407	ADB224557
DAMD17-95-1-5048	ADB230013
DAMD17-95-C-5006	ADB219041
95MM5508	ADB227588
95MM5522	ADB229897
95MM5537	ADB227721
95MM5596	ADB229924
96MM6652	ADB220033
96MM6653	ADB221466
96MM6654	ADB222409

2. Point of contact for this request is Ms. Betty Nelson at DSN 343-7328 or email: betty nelson@ftdetrck-ccmail.army.mil.

FOR THE COMMANDER:

PHYLIS M. RINEHART

Deputy Chief of Staff for Information Management

2-8-2000 3.00